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**EFFECTIVENESS OF EIA PUBLIC PARTICIPATION FOR MIXED LAND-USE
DEVELOPMENTS: A CASE STUDY OF LEGAL COMPLIANCE WITH 2010 AND
2014 EIA REGULATIONS IN THE GAUTENG PROVINCE**

By

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ABSTRACT

Environmental Impact Assessments (EIA) are planning tools aimed at predicting both positive and negative environmental impacts (which may be biophysical, social and economic) resulting from proposed development projects. Public participation is an integral part of such EIA procedures, the goal being to attain and ensure representability in environmental decisions and sustainable development. This study attempts to shed light on the effectiveness of public participation for mixed land-use developments in various parts of the Gauteng province. To address this main goal, a case study of the quality of documented public participation on environmental impact assessment reports (EIARs) was conducted with special reference to legal compliance to South African 2010 and 2014 EIA Regulations. The aim of this case study was achieved by means of a modified Lee and Colley Review Package.

The results of this study show that the reports undertaken in terms of the 2014 EIA Regulations were well written and displayed an excellent quality rating in comparison to those undertaken under the 2010 EIA Regulations. Ten percent (10%) of the reports undertaken in terms of the 2014 EIA Regulations displayed an unsatisfactory quality rating as there were omissions and inadequacies. However, 90% of the reports in this batch were rated as satisfactory ("A-B") because the information provided was adequate for the competent authority to make a proper decision. However, major omissions and inadequacies were observed in the reports compiled in terms of the 2010 EIA Regulations and as a result, 30% of them were rated as unsatisfactory ("D-F"), with only 70% displaying a satisfactory quality ("A-C").

The notification of Interested and Affected Parties, the supply of background information document and accessibility of the EIARs were some of the strengths derived from the analysed reports. The omissions and deficiencies noted included missing information such as the details of the EAPs, the appropriateness of language used, and indication of the duration of public participation. The results of this study are similar to some of the researches in South Africa whereby the quality of public participation is generally satisfactory despite a few problems areas. Based on the findings and conclusions in this study, some recommendations have been suggested for improved public participation in environmental decision-making processes.

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ABBREVIATIONS

BAR:	Basic Assessment Report
CA:	Competent Authority
DEA:	Department of Environmental Affairs
EA:	Environmental Authorisation
EAP:	Environmental Assessment Practitioner
ECA:	Environment Conservation Act (Act No. 73 of 1989)
EIA:	Environmental Impact Assessment
EIAR:	Environmental Impact Assessment Report
GDARD:	Gauteng Department of Agriculture and Rural Development
I&APs:	Interested and Affected Parties
NEMA:	National Environmental Management Act (Act No. 107 of 1998)
PAIA:	Promotion of Access to Information Act (Act No. 2 of 2000)
PAJA:	Promotion of Administrative Justice Act (Act No. 3 of 2000)
PPP:	Public Participation Process
S&EIR:	Scoping and Environmental Impact Assessment Reporting Process

CHAPTER 1

INTRODUCTION AND RESEARCH CONTEXTUALISATION

1.1 INTRODUCTION

Rapid urbanisation and industrialisation which took place in the First World Countries before and after the First and Second World Wars gave rise to serious concerns regarding environmental pollution, loss of biodiversity, and land degradation (Pacifia and Ogola, 2007; Li, 2008). Developers and communities began to realise some adverse environmental impacts that have resulted from unrestrained extraction of natural resources and environmentally unfriendly projects during the early 1960s (Pacifia and Ogola, 2007; Aucamp, 2009). As a result of these development pressures, the need for environmental planning tools that can ensure that the negative impacts on the environment are mitigated effectively led to the establishment of the National Environmental Policy Act (NEPA) in 1969 in the United States of America (USA) (Glasson et al., 2005; Vääntänen and Marttunen, 2005; Pacifia and Ogola, 2007; Aucamp 2009; Brombal et al., 2017). The USA was therefore the first country in which environmental policy and legal frameworks were enacted, thus becoming the birthplace for the conceptualisation and implementation of Environmental Impact Assessment (EIA) (Vääntänen and Marttunen, 2005, Aucamp, 2009, Houderquin, 2012, Brombal et al., 2017). The rest of the world followed this as an example (Singapore in 1972, China in 1979, Denmark in 1989, Namibia in 2004 and South Africa in 1997 (Vääntänen and Marttunen, 2005; Aucamp, 2009; Houderquin, 2012; Brombal et al., 2017).

Environmental obligations and rights are provided for in Chapter 2, Section 24 of the Constitution of the Republic of South Africa (Act No. 108 of 1996) (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). The concept of EIA gained serious momentum in South Africa around the late 1997; subsequent to the enactment of the National Environmental Management Act (NEMA) (Act No. 107 of 1997) (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). Prior to this time, EIA was not strictly enforced nor regulated in South Africa. Thus, NEMA (1998) is the most important watershed law for environmental governance in South Africa, including environmental assessments. This law has annulled the previous act [the then, Environmental Conservation Act (ECA) (Act No. 73 of 1989)] which governed environmental administration in South Africa prior to 1998 (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010).

The application of Environmental Impact Assessments is specified in Chapter 5, Section 24 of NEMA (van der Linde and Feris, 2010; Hoosen, 2010). On the 21st April 2006, the Minister of the Department of Water and Environmental Affairs (DWEA, known as the Department of Environmental Affairs (DEA) and the Department of Water and Sanitation (DWS) separately) promulgated Regulations in terms of Chapter 5 of EMA (Aregbeshola, 2009; Hoosen, 2010). NEMA EIA Regulations define two broad processes for an EIA, namely: (i) Basic Assessments (BA) as well as (ii) Scoping and Environmental Impact Reporting (S&EIR) (Aucamp, 2009). S&EIR is applicable to all projects likely to have significant environmental impacts due to their nature or extent, or activities associated with potentially high levels of environmental degradation, or activities for which the impacts cannot be easily predicted. On the other hand, a BA is required for projects with less significant impacts or impacts that can easily be mitigated (Aucamp, 2009).

The NEMA EIA Regulations came into effect on the 3rd July 2006 and replaced the EIA Regulations that were promulgated in terms of the Environment Conservation Act (Act No. 73 of 1989) in 1997 and introduced new provisions for Environmental Impact Assessments (EIAs) (van der Linde and Feris, 2010). Subsequently, the National Environmental Management Amendment Act (Act No. 62 of 2008) (NEMAA) was promulgated on the 9th January 2009 and came into effect on the 1st May 2009 (van der Linde and Feris, 2010). NEMAA made a number of significant amendments to the general provisions applicable to all EIAs. On the 18th June 2010, the relevant Minister promulgated the amended EIA Regulations in terms of Chapter 5 of NEMA. From the date of effect of these amended EIA Regulations, i.e. 2nd August 2010, these EIA Regulations replaced the previous EIA Regulations that were promulgated on the 21st April 2006 (Aregbeshola, 2009, Hoosen, 2010, van der Linde and Feris, 2010). Unexpectedly, the 2006 EIA Regulations were followed by the new 2010 EIA regulations. Be that as it may, in 2014 on the 8th of December, new EIA Regulations came into effect and replaced the previous EIA Regulations of 18th June 2010. Almost all development projects likely to cause significant environmental damage in South Africa require the undertaking of an EIA prior to commencement (Hoosen, 2010). Similarly, public participation is an integral part of such EIA procedures; the goal being to attain and ensure representability in environmental decisions and sustainable development (Hoosen, 2010).

Unfortunately, this is not an idea embraced by all project developers as they would like to quickly obtain environmental authorization so that proposed projects can start without any delays. Developers also think that public participation is not necessary because they believe

stakeholders lack expert skills and knowledge to participate efficiently (O'Faircheallaigh, 2010; Adomokai and Sheate, 2016). Regardless of this disconnect between the implementation of regulations regarding public participation and the actual experience on the ground, there is limited research on the role and effectiveness of public participation in South Africa (Aregbeshola, 2009; Hoosen, 2010; Mngoma, 2010; Mnengwane, 2014). Therefore, this dissertation is shedding light on the effectiveness of the public participation process in South Africa with specific reference to the quality of this process for full EIA applications, planned specifically for mixed land-use developments in the Gauteng province of South Africa.

The Gauteng province is located in the north-eastern interior of South Africa and measures approximately 18,176 km² in extent (GDARD, 2016). It is the smallest but the most densely populated province (with ~13 million people) (StatsSA, 2017). Initially, it was a mining and industrial town and has evolved to become South Africa's important economic node contributing about 34% of the national GDP (GDARD, 2016). It is comprised of three metropolitan municipalities [i.e. City of Johannesburg; City of Tshwane; and City of Ekurhuleni; and two District Municipalities (i.e. Sedibeng district municipality and West Rand District municipality) (GDARD, 2016). In line with the national government's social and economic transformation plan, Gauteng's provincial government has launched the concept of megacities.

The establishment of megacities is aimed at re-developing the social landscape in South Africa and the model of such cities include various land use zones as opposed to the model created during the apartheid era which comprised single use zones, segregation of class and race (Mkentane, 2017). Such mixed land-uses include residential areas, office parks, shops, schools and other public services in proximity to one another, thus making an attempt to stimulate economic activity and opportunities for emerging entrepreneurs while trying to reverse the development of urban sprawl (Mkentane, 2017). Urban Sprawl has to do with the expansion of the city towards the outer most parts of the urban landscape away from the multi-functional, high density city centre. Thus, urban sprawl creates unnecessary wide distances between the various land uses (i.e. homes, places of work and shopping centres) and a spatial tendency towards the development of a dispersed urban form. With such a dispersed urban setting, there is increased and unsustainable consumption of infrastructure and other municipal resources (Baffi et al., 2018). To overcome inefficiencies associated with the spatial distribution produced by urban sprawl, developments with integrated

functions are clustered along transport nodes (GDARD, 2016). Figures 1.1 and 1.2 show examples of mixed-residential developments earmarked for the Gauteng province.

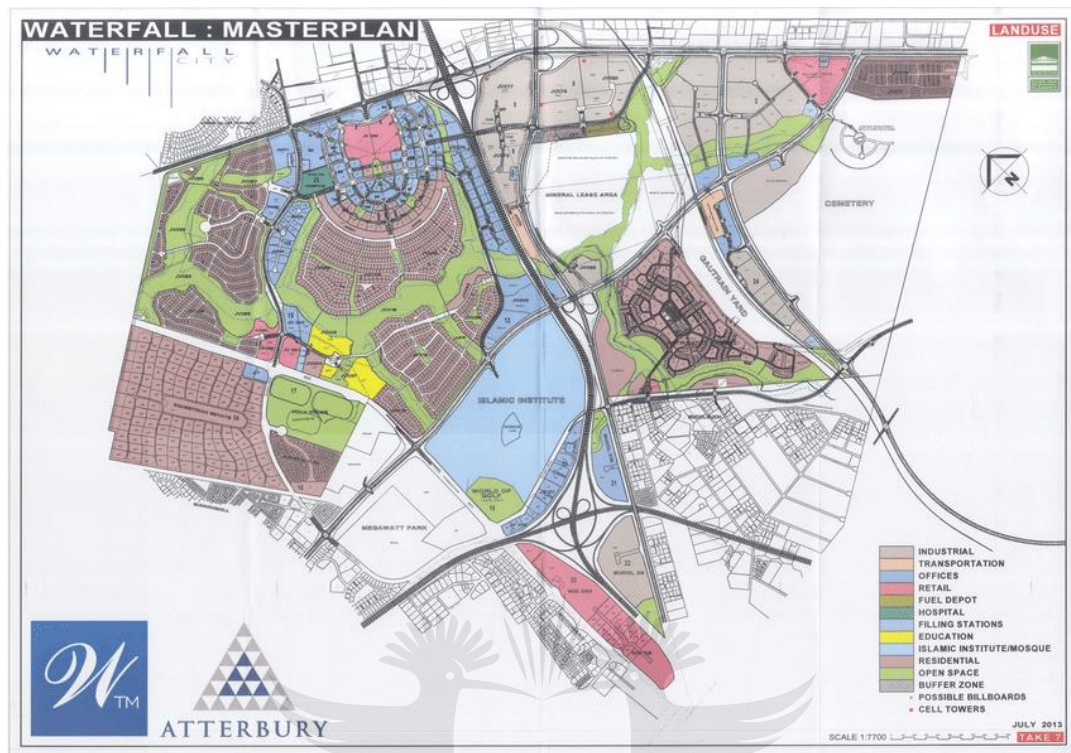


Figure 1.1: Examples of Mixed Land-Use Developments in Gauteng: Waterfall City ([www. waterfallcity.co.za](http://www.waterfallcity.co.za)).

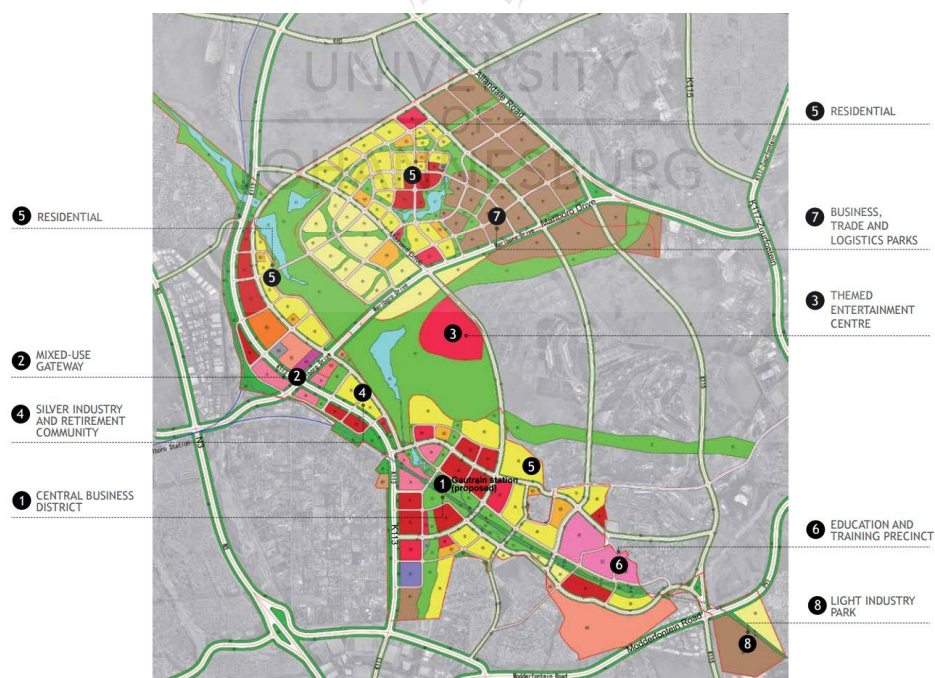


Figure 1.2: Example of Mixed Land-Use development in Gauteng: Modderfontein Smart City (www.businesstech.co.za).

Mixed land-use developments are acknowledged for providing high accessibility to daily economic and social needs of communities (Sackey, 2009; Herndon, 2011; Wardner, 2014). These developments are considered efficient because they save money and time spent on travelling to access various services (Sackey, 2009; Herndon, 2011; Wardner, 2014). Furthermore, the close proximity to services and other land uses mean that people can use their cars to a lesser extent when they commute to work and other points within the city landscape. With restricted dependence upon motor cars for mobility and more reliance on public transport, we can expect less emissions into the atmosphere and reduced traffic congestion (Sackey, 2009; Herndon, 2011; Wardner, 2014). Therefore, the stresses and anxiety resulting from traffic delays is alleviated by the multifunctional nature of mixed land-use developments (Sackey, 2009; Herndon, 2011; Wardner, 2014). The proximity of services also results in the reduction of infrastructural maintenance costs in the long term (Sackey, 2009; Herndon, 2011; Wardner, 2014). The mixed land-use developments consist of mostly skyscrapers, types of buildings that require a smaller footprint on land when compared to single land uses (Sackey, 2009; Herndon, 2011; Wardner, 2014). Mixed land-use developments also provide socially vibrant and friendly environments and can eliminate the segregation characteristic of suburbs (Sackey, 2009; Herndon, 2011; Wardner, 2014). Mixed land-use development provides businesses with an opportunity to house their staff (i.e. retail and office staff) under one roof, thus maximising profits (Sackey, 2009; Herndon, 2011; Wardner, 2014).

The downsides of mixed land-use developments are that most of them are massive in extent with a little bit of everything (services), and this may pose a challenge to the owner and tenants as it may be hard to get economies of scale required in smaller developments (Sackey, 2009; Herndon, 2011; Wardner, 2014). Furthermore, these developments may also be somewhat difficult to manage because of their large sizes and complexity. They may require a group of managers to work closely together to ensure the effective management of various services (Sackey, 2009; Herndon, 2011; Wardner, 2014). Parking space within mixed land-use developments is often limited, as the same parking space allocated for apartment is also used for gymnasiums, restaurants, shopping centres and medical rooms, for example (Sackey, 2009; Herndon, 2011; Wardner, 2014). The allocation of parking for different functions within mixed land-use developments results in the development of parking spaces often referred to as “floating parking” (Sackey, 2009; Herndon, 2011; Wardner, 2014). Floating parking means that landlords do not provide adequate parking for all services as they believe that making use of different parts of the development will make parking space available elsewhere (Sackey, 2009; Herndon, 2011; Wardner, 2014). Noise

transfer can pose a problem within mixed land-use developments when incorrectly implemented (i.e. if housing units are in close proximity to night clubs). It is thus important for the developer to ensure that services are optimally placed (Sackey, 2009; Herndon, 2011; Wardner, 2014).

1.2 STATEMENT OF THE RESEARCH PROBLEM

An EIA process should establish ways to minimise negative environmental impacts and improve the environmental sustainability of planned developments so that they are in line with the carrying capacity of the local environment (Duthie, 2001; Sadler, 2003; Wahaab, 2003; Cashmore et al., 2004; Glasson et al., 2005; Phillips, 2011). EIAs also provide feasible development alternatives to proposed development actions and the associated sites (Duthie, 2001; Sadler, 2003; Wahaab, 2003; Cashmore et al., 2004; Glasson et al., 2005; Phillips, 2011). The purpose of the EIA is to provide competent authorities with sufficient information to make a record of decision on submitted EIA applications (Spalling, 2001; Bastidas, 2004; Glazewski, 2005; Weaver, 2003; Wahhab, 2003; Nadeem and Hameed, 2008; Saeed et al., 2012; Warbuton, 2014). In addressing these goals, an EIA process is comprised of various stages such as screening, scoping, impact prediction, assessment of project alternatives, EIA review and public participation (Sandham and Pretorius, 2008; Hartley and Wood, 2005; Li, 2008; Aucamp, 2009; Nadeem and Fischer, 2011; Houderquin et al., 2012; Brombal et al., 2017).

Public participation is a crucial and an integral component of EIAs (Baker and Mclelland, 2003; Hartley and Wood 2005; Hoffman, 2007; Barbour, 2007; Du Plessis, 2008; Aucamp, 2009; Nadeem and Fischer, 2011; Houderquin et al., 2012). Public participation is defined as a process whereby the general public, Interested and Affected Parties (I&APs), Non-Government Organisations (NGOs), Non-Profit Organisations (NPOs) and organs of state take part in a process of environmental decision-making (Baker and Mclelland, 2003; Hartley and Wood 2005; Barrow, 2006; Aucamp 2009; Nadeem and Fischer 2011; Glasson et al., 2012; Houderquin et al., 2012). The effectiveness and extent of participation varies widely depending on the type of development, skills and experiences of the stakeholders (Väntänen and Marttunen, 2005; Doelle and Sinclair, 2006; du Plessis, 2008; Aregbeshola, 2009; Hoosen, 2010; O'Faircheallaigh, 2010; Mnengwane, 2014; Brombal et al., 2017; Schoeman, 2017). This process is so important to the extent that it is the only obligation for which an exclusion cannot be given from the EIA process (Department of Environmental Affairs, 2010). Public participation is also regarded as the "chant" of environmental governance (Mnengwane, 2014).

Ineffective public participation leads to human conflicts, project delays, and lawsuits from Interested and Affected Parties as they allege that they have been excluded from the decision-making process and their views, opinions and concerns are not taken into consideration (Masango, 2002; Reed, 2008; Murombo, 2008; Li et al., 2012; De Santo, 2016; Gu, 2016). Worldwide, there is an increase in the dissatisfaction of stakeholders regarding insufficient involvement in EIA procedures and subsequent decisions that have an impact on their biophysical environment, social capital and economic prospects (Li et al., 2012; De Santo, 2016; Gu, 2016). Effective public participation in the EIA processes should, therefore, allow the public to express their views and the decision-makers to take into consideration the concerns, issues and suggestions which may be pertinent to the current EIA scope, thus increasing accountability and transparency in the decision-making process and adding to the education of the public on environmental issues and support for the decision made (Murombo, 2008; Del Furia and Wallace-Jones, 2000; Hartley and Wood, 2005; Barrow, 2006; Glasson et al., 2005; Houderquin et al., 2012; Mofokeng, 2017; Schoeman, 2017).

Del Furia and Wallace-Jones (2000) argue that for stakeholder engagement in EIA to be effective, the purpose of engaging stakeholders must be addressed fully. There is also a diversity of opinions as to how it can be conducted effectively and efficiently (Masango, 2002; Murombo, 2008; O'Faircheallaigh, 2010; Nadeem and Fischer, 2011; Adomokai and Sheate, 2016). In light of the aforementioned role of public participation in the EIA process there is limited research on public participation with particular focus on mixed land use developments within the Gauteng province. Although studies evaluating the quality of public participation in South Africa have been undertaken, none of them focused on mixed land use developments in Gauteng. Instead, they focused on the quality of Environmental Impact Assessments (EIAs) for various development projects in South Africa (Kruger and Chapman, 2005; Hooffman, 2007; Aregbeshola, 2009; Kruger, 2012; Thorpe, 2014; Wiseman and Rossouw, 2004, Warburton, 2014; Mofokeng, 2017). To the contrary, this dissertation has evaluated the quality of the public participation process as documented in the selected EIARs for mixed land-use development projects as one way of assessing the effectiveness of this process. The projects were planned for the Gauteng province of South Africa. The study focussed specifically on their legal and procedural compliance to the 2010 and 2014 South African EIA Regulations as far as public participation was concerned. In order to accomplish this broad aim, the following research objectives were formulated, and they are summarised as follows:

- To draw a distinction between the 2010 and 2014 EIA Regulations with respect to statutory requirements for public participation;
- To assess the quality of public participation in EIAs conducted under the 2010 EIA Regulations;
- To examine the quality of public participation in EIAs undertaken under the 2014 EIA Regulations;
- To identify the variations, gaps, and flaws (or omissions and inadequacies) in the public participation process undertaken under the 2010 and 2014 EIA regulations; and
- To provide recommendations for effective public participation process.

1.3 BRIEF OVERVIEW OF METHODOLOGY

The objectives of this study were carried out by reviewing 20 Scoping and Environmental Impact Assessment Reports (S&EIR) (10 from each regime) reports for mixed land-use developments undertaken under the 2010 and 2014 EIA regimes in Gauteng. These reports were obtained from the Gauteng Department of Agriculture and Rural Development (GDARD), which is the authorising body for environmental authorisations in Gauteng. The modified Lee and Colley Review Package was adopted for the review of the abovementioned reports.

1.4 LAYOUT OF THE DISSERTATION

This dissertation consists of 5 chapters. Chapter 1 provides an introduction and preliminary background to the study. This chapter is comprised of a brief introduction and summarises the research problem and research objectives whilst providing justification and significance of the research.

Chapter 2 gives a review of the public participation process in the literature on environmental impact assessments. This review examines the concept and interpretations of public participation process in EIAs. The objectives, benefits and challenges during public participation are discussed. Lastly, the chapter concludes with a brief review of the legal requirements for public participation locally and internationally.

Chapter 3 provides an explanation of the methodology used to acquire data and the analysis of the data to address the research objectives. Chapter 4 presents the research findings as

well as their discussion. Firstly, the findings are presented and discussed separately for each EIA regime (2010 then 2014) and later on a comparative assessment of both EIA regimes is provided. The final chapter (Chapter 5) provides concluding remarks and recommendations drawn from the research.



CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter focuses on public participation within Environmental Impact Assessments (EIA). The chapter begins by providing an overview of EIAs and defines public participation process within the context of EIAs. It further examines the role of stakeholder engagement in EIAs and challenges encountered. It also provides an insight into the benefits brought forth by effective public participation. Lessons learnt from both local and international literature and experiences shared by various researchers are reflected upon. This chapter concludes by shedding light into what the law requires, international treaties and public participation frameworks currently in place in South Africa.

2.2 THE DEVELOPMENT OF ENVIRONMENTAL IMPACT ASSESSMENTS (EIA)

Environmental Impact Assessments (EIA) are planning tools used to determine both detrimental and beneficial environmental impacts which may be biophysical, social and economic; resulting from proposed infrastructural development projects (Weston, 2000; Wood, 2003; Cashmore et al., 2004; Moloto, 2005; Kruger and Chapman, 2005; Hartley and Wood, 2005; Nadeem and Fischer, 2011; Houderquin et al., 2012; Brombal et al., 2017). EIAs are essentially intended to safeguard the protection of the environment (biophysical, social and economic), thus ensuring that developments are undertaken in a sustainable manner (Weston, 2000; Wood, 2003; Cashmore et al., 2004; Leonard, 2004; Moloto, 2005; Economic Commission for Africa, 2005; Pretorious and Sandham, 2006; Bilgin, 2015). The protection of the environment is at the forefront of EIA systems as opposed to the other traditional mechanisms such as a cost-benefit analysis which have previously investigated the impacts of the development proposals on the environment (Appiah-Opoku, 2001; Bruhn-Tysk and Eklund, 2002; Bekhechi and Mercier, 2002; El-Fadl and El-Fadel, 2004). These traditional mechanisms were not undertaken in a holistic and integrated manner required by EIAs (Wood, 2003; Leonard, 2004; Glasson et al., 2005; Economic Commission for Africa, 2005; Li, 2008).

The EIA process comprises various steps such as screening, scoping, impact prediction, assessment of project alternatives, EIA review and public participation (Hartley and Wood, 2005; Glasson et al., 2005; Li, 2008; Aucamp, 2009). Public participation is an integral component of EIAs, which seeks to ensure the involvement of all Interested and Affected

Parties related to the development proposal (Hartley and Wood, 2005; Hoffman, 2007; Nadeem and Fischer, 2011; Houdierquin et al., 2012; Brombal et al., 2017). In most countries (both developed and developing), legislations and frameworks have been established to facilitate public participation in EIAs (Wood, 2003; Leonard, 2004; Glasson et al., 2005; Fourie, 2010). In line with international best practises, stakeholders are involved at the design stages where the development concept is proposed and established and they are also engaged in the later stages where alternatives and mitigation measures are provided to ensure collaborative decision-making processes (Wood, 2003; Leonard, 2004; Glasson et al., 2005; Economic Commission for Africa, 2005; Fourie, 2010). Consultations with the public and state departments in EIAs can assist in maintaining control, completeness and quality of the EIA process (Wood, 2003; Leonard, 2004; Glasson et al., 2005; Economic Commission for Africa, 2005; Fourie, 2010). Public participation also ensures that the views, concerns and interests of all stakeholders are adequately addressed and taken into consideration (Masango, 2002; Glasson et al., 2005; Moloto, 2005; du Plessis, 2008; Aucamp, 2009; Fourie, 2010; Hoosen, 2010; Mngengwane, 2014). The generic EIA process is illustrated in Figure 2.1 below.

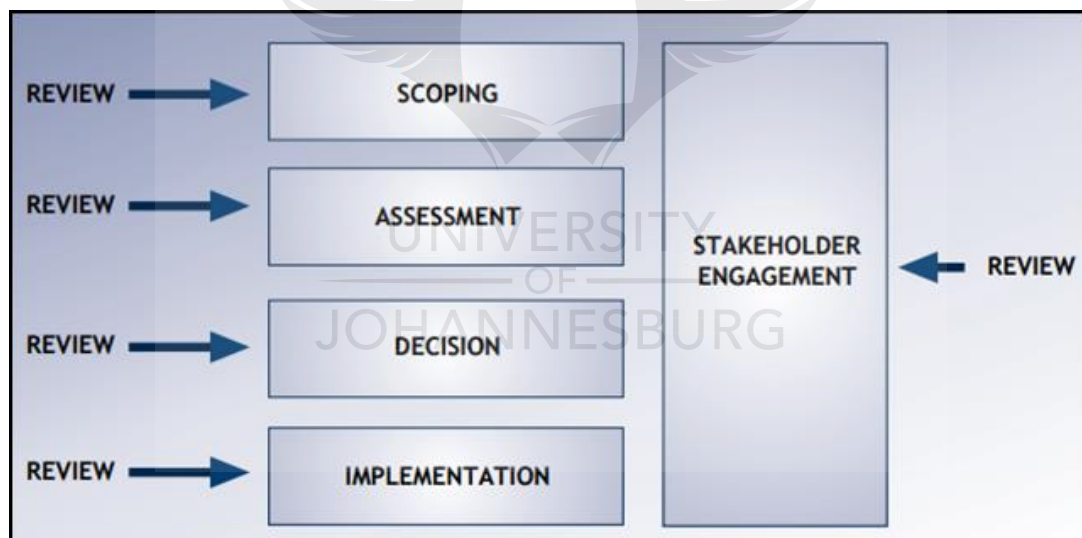


Figure 2.1: Generic EIA Process (DEA, 2004).

2.3 PUBLIC PARTICIPATION PROCESS IN EIAs

2.3.1 *What is Public Participation?*

Public participation in environmental decision-making processes provides a platform to ensure collaboration with stakeholders in matters affecting the environment (Bastidas, 2004; Du Plessis, 2008; Fourie, 2010; Doelle and Sinclair, 2006; Mngengwane, 2014; Aloni et al., 2015). Extensive public participation forms the foundation for good governance and is significant for the realisation of sustainability in development proposals (International Association for Public Participation, 2000; Masango, 2002; Bastidas, 2004). Various studies have attempted to define public participation over the years (Canter, 1996; Greyling, 1999; International Association for Public Participation, 2000; DEAT, 2002; Brombal et al., 2017).

Public participation can be defined as a process in which the public, Interested and Affected Parties (I&APs), Non-Government Organisations (NGOs), Non-Profit Organisations (NPOs) and organs of state interested or affected by the development proposal play a role in the decision making process (Baker and Mclelland, 2003; Hartley and Wood 2005; Vntnen and Marttunen, 2005; Glasson et al., 2005; Aucamp 2009; O'faircheallaigh, 2010; Nadeem and Fischer 2011; Houderquin et al., 2012; Brombal et al., 2017). The level and extent of involvement allows for different levels of influence (International Association for Public Participation, 2000; DEAT, 2002; Masango, 2012; Brombal et al., 2017). As illustrated in Figure 2.1, public participation is a significant stage in EIAs, which requires the involvement of Interested and Affected Parties in almost every step of the process (Del Furia and Wallace-Jones, 2000; Bastidas, 2004; Du Plessis, 2008; Fourie, 2010; Doelle and Sinclair, 2010; Mngengwane, 2014; Aloni et al., 2015). This involvement can be achieved through timeous and continued processes that are deemed to be transparent, accessible while providing key information and responses to the concerns and suggestions raised by participants (Nadeem and Fischer, 2011; Brombal et al., 2017).

Research suggests that the overall effect of public involvement in environmental decision-making processes is still poor, specifically in Third World Countries (Bastidas, 2004; Du Plessis, 2008; Fourie, 2010; Doelle and Sinclair, 2006; Mngengwane, 2014; Aloni et al., 2015). However, this process is mostly efficient in countries where it is a legal requirement or when it is initiated in the initial stages of the EIA process (Bastidas, 2004; Du Plessis, 2008; Fourie, 2010; Doelle and Sinclair, 2006; Mngengwane, 2014; Aloni et al., 2015). Although public participation has been perceived as a relevant step for enhancing the management of bio-physical environmental resources, a lot still needs to be done to tackle the relevant

issues because of the diversity of participants which has proved to be problematical over the years (Reed, 2008; Hage et al., 2010; Centre for Environmental Rights, 2013). Discussions on public participation are focused on effective engagement of stakeholders and its positive contribution to environmental governance (O'Faircheallaigh, 2010, Masango, 2010; Fourie, 2010; Mnengwane, 2014). Researchers around the globe have stressed the significance of public participation in ensuring improved environmental governance (O'Faircheallaigh, 2010, Masango, 2010; Fourie, 2010; Mnengwane, 2014; Schoeman, 2017).

2.3.2 The objectives of Public Participation

The request by Interested and Affected Parties (I&APs) to be involved in processes which have an impact on their environment has resulted in the necessity for public involvement in environmental decision-making processes (Masango, 2002; Kotze, 2008). The inclusion of I&APs in decision making processes has in fact resulted in the reduction of conflicts and litigations (Masango, 2002; Kotze, 2008; Hoosen, 2010). The International Association of Public Participation (IAP2) argues that ensuring sustainability of developments requires compromises and a balance to be reached between economic growth, social justice, and ecological integrity (Masango, 2002; Kotze, 2008). The International Association for Impact Assessment (2006) maintains that public involvement is important in environmental governance and ensures the empowerment of citizens (Masango, 2002; Kotze, 2008).

The provision of information to the I&APs regarding environmental impacts that may emanate from project proposals is one of the objectives for conducting EIAs (Glasson et al., 2005; Reed, 2008; Li, 2008; Aucamp, 2009; Hage et al., 2010). The public is thus afforded an opportunity to provide inputs, concerns and comments which are then subsequently incorporated into the EIA reports (Glasson et al., 2005; Reed, 2008; Li, 2008; Aucamp, 2009; Hage et al., 2010). Environmental Impact Assessments are technical in nature and inputs from various technical experts are required to compile EIA reports (Glasson et al., 2005; Reed, 2008; Li, 2008; Hage et al., 2010). These inputs generally address environmental issues and provide mitigation measures to ensure sustainable development (Glasson et al., 2005; Reed, 2008; Li, 2008; Hage et al., 2010). The EIA reports can be difficult for ordinary people to understand their purpose and implications (Glasson et al., 2005; Reed, 2008; Li, 2008; Hage et al., 2010). Therefore, public participation has been regarded as a means of providing information as well as clarity to stakeholders which subsequently promotes environmental awareness (Glasson et al., 2005; Reed, 2008; Li, 2008; Hage et al., 2010).

Public participation assists in strengthening the provision of information and the involvement of stakeholders in EIAs (Glasson et al., 2005; Reed, 2008; Li, 2008; Fourie, 2010; Hage et al., 2010). The active involvement of stakeholders allows the developer and competent authorities to have a better understanding of the extent to which participants are eager to consent to any trade-offs which may be needed (Glasson et al., 2005; Reed, 2008; Li, 2008; Fourie, 2010; Hage et al., 2010). The involvement of stakeholders thus ensures a more informed decision-making process and eventually more justifiable developments (Aucamp, 2009; Hage et al., 2010; Masango, 2012). Accessibility and provision of adequate information coupled with an opportunity for participation assists in building the integrity of environmental impact assessment and management processes (Aucamp, 2009; Hage et al., 2010; Masango, 2012).

The involvement of I&APs can be used to; (i) relay information about a project; (ii) clear out misconceptions; (iii) provide a better understanding of matters pertinent to the project proposal; and (iv) address concerns in the early stages (planning & design) of the development (Wood, 2003; Glasson et al., 2005; du Plessis, 2008; Fourie, 2010). The process of considering and addressing various inputs, issues and concerns of I&APs may provide the developer with measures to revise project designs and amend certain aspects of the project, thus preventing appeals which could result in project delays (Wood, 2003; Glasson et al., 2005; du Plessis, 2008; Fourie, 2010). Changes made to the project during the early design phase are cheaper to accommodate than those made during the final stages of the development (Wood, 2003; Glasson et al., 2005; du Plessis, 2008; Fourie, 2010).

Aucamp (2009) and Nadeem and Fischer (2011) emphasise that public involvement is a multi-purpose stage which is aimed at:

- Affording Interested and Affected Parties an opportunity to participate in the decision-making process which promotes social fairness and collaboration;
- Educating and raising awareness as it results in the provision of information and information sharing, thus citizens are informed regarding the likely environmental impacts which may result from various development proposals;
- Resolving conflicts which may arise during participation process by providing clarity to development aspects and reaching compromises;
- Guaranteeing that there is “buy-in” from the public;
- Improving and ensuring that decision making processes are well informed;

- Ensuring accessibility of information by participants from local authorities, state organs, proponents;
- Improving the developer's transparency and accountability; and
- Creating rapport amongst participant's, developers, state entities and the public.

2.3.3 *Efficiency of Public Participation*

Discussions around public involvement are fixated on its efficiency and positive influence in the decision-making processes (Del Furia and Wallace-Jones, 2000; Baker and McLelland, 2003; O'Faircheallaigh, 2010; Doelle and Sinclair, 2006; Nadeem and Fischer 2011; Houderquin et al., 2012; Udofia et al., 2016). The active involvement of stakeholders does not guarantee that all Interested and Affected Parties (I&APs) will be in support of the development proposal (O'Faircheallaigh, 2010; Doelle and Sinclair, 2006). The public participation process is not always examined critically, and as a result, the significance of its undertaking can be lost, thus leading to ineffective implementation (O'Faircheallaigh 2010). Nadeem and Fischer (2011) are of the view that the intentions of affording I&APs an opportunity to participate in the EIA process must be outlined and realised for public participation to be successful. O'Faircheallaigh (2010) upholds that the involvement of stakeholders at the earliest stages of the EIA process is of utmost importance and that the views of the public must be taken into cognisance and reasons must be provided where comments have not been considered.

The public is thus given a chance to influence the decision-making process in matters which could have an impact on their livelihoods and well-being (Aucamp, 2009; Hoosen, 2010; O'Faircheallaigh, 2010; Kegne et al., 2013). Conducting public participation at the initial stages of the process is important as it ensures that the public is afforded sufficient time to dissect, raise issues, comment and clarify misunderstandings during public meetings (O'Faircheallaigh 2010). This will in turn result in the avoidance of lawsuits, increased stakeholder trust and support, and the empowerment of stakeholders (O'Faircheallaigh 2010; Gu 2016; De Santo, 2016). Del Furia and Wallace-Jones (2000) argue that for stakeholder engagement in EIA to be efficient, the purpose of engaging stakeholders must be fulfilled. The advantages of public participation are often considered lightly and partially for this reason (O'faircheallaigh, 2010; Nadeem and Fischer, 2011; Adomokai and Sheate, 2016). The fundamental basis for public participation is inadequately expressed which makes it challenging to estimate how to undertake it efficiently (O'faircheallaigh, 2010; Nadeem and Fischer, 2011; Adomokai and Sheate, 2016).

The concept of efficient undertaking of EIAs require the exchange of information, knowledge and experiences and the reduction of misunderstandings which could result in public objections (Glasson et al., 2005; du Plessis, 2008; Aucamp, 2009; Australia-China Environment Development Partnership, 2010). Public participation is considered effective when stakeholders have been thoroughly involved and are well-informed about the project proposal (Del Furia and Wallace-Jones, 2000; Hartley and Wood, 2005; Glasson et al., 2005; Houderquin et al., 2012). I&APs must be motivated to participate; in other words, they must be eager to attend, provide inputs, share ideas and heed the views of other stakeholders (Del Furia and Wallace-Jones, 2000; Hartley and Wood, 2005; Glasson et al., 2005; Houderquin et al., 2012). Where the views of I&APs have not been taken into consideration, reasons for such exclusions must be provided (Del Furia and Wallace-Jones, 2000; Hartley and Wood, 2005; Glasson et al., 2005; Houderquin et al., 2012).

Some of the crucial principles which can be adopted to ensure effective public participation are provided below:

- Study the type of stakeholders involved;
- The technicality of the information provided must be based on the target audience (simplify the information based on the target audience);
- Make appropriate use of the language to stakeholders;
- Utilise visual aids to enhance understanding;
- Make use of media platforms such as the local newspapers, local radio stations etc.
- Afford more time for the public participation process and ensure that measures employed are exhaustive;
- Announce the project proposal and the intention to develop in advance, the longer the people know about a certain development the more time they should participate and assist in the project design;
- Ensure that information is easily accessible to participants;
- Provide timeous responses to queries and suggestions;
- Involve and motivate vulnerable groups to participate;

(Source: Australia-China Environment Development Partnership, 2010).

The identification of stakeholders is the most crucial stage of public participation (Glasson et al., 2005; du Plessis, 2008; Aucamp, 2009). The exclusion of stakeholders could result in competent authority rejecting the application and requesting for further public participation to be undertaken (Glasson et al., 2005; du Plessis, 2008; Aucamp, 2009). The key issues must

become obvious in the initial phases of the project such as screening and scoping (Glasson et al., 2005; du Plessis, 2008; Aucamp, 2009). It is also important to identify key stakeholders that will assist in the process (Glasson et al., 2005; du Plessis, 2008; Aucamp, 2009). The extent and significance of the development proposal, need and desirability as well as the urgency of the project, engagement of all authorities (local, provincial and national), relevant NGOs in the area, Interested and Affected Parties and all environmental and social issues must be taken into consideration (Glasson et al., 2005; du Plessis, 2008; Aucamp, 2009).

For public participation process to be effective, the environmental assessment practitioners (EAPs) must clarify all the requirements, guidelines and techniques and the way forward at the start of each gathering or meeting (Glasson et al., 2005, du Plesis, 2008; Aucamp, 2009). This will assist in preventing misconceptions and will enhance the integrity of the process (Glasson et al., 2005, du Plesis, 2008; Aucamp, 2009). Agreements are not always attained but it is crucial to ensure that various stakeholders respect each other's views, input and concerns (Glasson et al., 2005, du Plesis, 2008; Aucamp, 2009). Focus must rather be placed on negotiating matters pertinent to decision making (Glasson et al., 2005, du Plesis, 2008; Aucamp, 2009).

Advantages of involving and encouraging stakeholder engagement in EIAs have been noted worldwide (Del Furia and Wallace-Jones, 2000; Hoosen, 2010; Mngengwane, 2014). These advantages not only benefit the general public, but the developer also gain as effective public participation results in efficient planning, increase in the quality of decisions made, increased stakeholders support and reduction of controversies and objections (Del Furia and Wallace-Jones, 2000; Hoosen, 2010; Mngengwane, 2014).

The advantages of public participation in EIA are several and include enhanced project design, improved mitigation measures and increased authenticity of development undertakings (Del Furia and Wallace-Jones, 2000; Hoosen, 2010; Mngengwane, 2014). Societies are also motivated and equipped on matters that have an impact on their livelihood. This subsequently increases support and confidence in decision making processes (Mngoma, 2010; Mnengwane 2014;). A summary of the advantages of public participation during the environmental impact assessment of development proposals is provided below:

- Cooperative analysis of the significance of likely impacts (Glasson et al., 2005; Luyet et al., 2012);

- Addressing the requirements of I&APs (Glasson et al., 2005; Luyet et al., 2012);
- Ensuring that the public participation process is fair and objective (Glasson et al., 2005; Luyet et al., 2012);
- Prevention of appeals & litigations and reaching compromises (Glasson et al., 2005; Luyet et al., 2012);
- Improved support of decisions made (Glasson et al., 2005; Luyet et al., 2012);
- Improved project design incorporating local knowledge (Glasson et al., 2005; Luyet et al., 2012);
- Enhanced project understanding (Glasson et al., 2005; Luyet et al., 2012);
- Incorporation of different views and concerns (Glasson et al., 2005; Luyet et al., 2012);
- Public empowerment (Glasson et al., 2005; Luyet et al., 2012);
- Shortened processes due to overall support from various I&APs (Glasson et al., 2005; Luyet et al., 2012); and
- Less costly processes due to overall support from various stakeholders (Glasson et al., 2005; Luyet et al., 2012).

2.3.4 *The challenges experienced in public participation*

There is a substantial literature globally regarding the challenges relating to public participation in EIAs (Del Furia and Wallace-Jones, 2000; Hoosen, 2010; Mngengwane, 2014; De Santo, 2016; Udofia et al., 2016; Brombal et al., 2017). These include limited financial resources to sustain participation, the timing of involvement in the proposal development and limited effect of project outcomes (Del Furia and Wallace-Jones, 2000; Hoosen, 2010; Mngengwane, 2014; De Santo, 2016; Udofia et al., 2016; Brombal et al., 2017). The major challenge is the lack of expertise due to the complexity and technicality of the EIA processes (Doelle and Sinclair, 2006; Aregbeshola, 2009; Mnengwane, 2014; De Santo, 2016). Therefore, stakeholders are not motivated and confident to participate as they feel they lack expert skills to participate (Doelle and Sinclair, 2006; Aregbeshola, 2009; Mnengwane, 2014; De Santo, 2016).

The involvement of the public may not result in a definite decision on a project as various stakeholder groups may have various concerns and priorities (Glasson et al., 2005; du Plesis, 2008; Aregbeshola, 2009; Mnengwane, 2014). The outcome of public participation may be representative of the opinions of the most active and outspoken stakeholder groups (Glasson et al., 2005; du Plesis, 2008; Aregbeshola, 2009; Mnengwane, 2014). Most

proponents engage with I&APs at the appeals and inquiry phase, a stage in which engagement has progressed into an effort to halt the development (du Plesis, 2008; Glasson et al., 2010). For this reason, most proponents do not see the constructive side of public participation (du Plesis, 2008; Glasson et al., 2012). Traditionally, stakeholder engagement has also had inferences of radicalism, hostility, interruptions and blocked developments (du Plesis, 2008; Glasson et al., 2012; Li et al., 2012; De Santo, 2016; GU, 2016). The public participation process is often perceived as formal, expensive and time consuming (Doelle and Sinclair, 2006; Li et al., 2012).

Public participation is also perceived as fixated on the procedures involved instead of expected outcomes (Doelle and Sinclair, 2006; Adomokai and Sheate, 2016). Most proponents argue that the process and the regulatory framework for public participation are embedded on the view that the proper coordination of the process will ultimately yield positive results; meaning that the participants are most likely to support the project proposal when the public participation process has been conducted in line with the legal requirements (Doelle and Sinclair, 2006). Most developers have avoided encouraging public involvement at the onset of the project proposal and this has resulted in the discouragement of citizens to participate and more objections being raised against such proposals (Doelle and Sinclair, 2006; Adomokai and Sheate, 2016).

Various studies measuring the quality of public participation in South Africa have been examined in this literature review. These studies can be summarised as follows:

- Environmental Impact Assessments (EIAs) for various development projects in South Africa (Kruger and Chapman, 2005; Hooffman, 2007; Aregbeshola, 2009; Kruger, 2012; Thorpe, 2014; Wiseman and Rossouw, 2004, Warburton, 2014; Mofokeng, 2017);
- Public participation prior to and during the EIA process: Transnet Case Studies (Schoeman, 2017);
- A legislative review of PP in the EIA regulations (Murombo, 2008);
- Stakeholder perceptions of public participation in development projects: A Case Study of the Social Impacts of the Mooi Mgeni Transfer Scheme Phase II (Markowitz, 2016),
- The role of PP in achieving social justice (Kruger and McDaid, 2005; Hoosen, 2010);

- The effectiveness of public participation in Environmental Impact Assessment in selected South African case studies (Mnengwane, 2014).

These studies revealed that the quality of public participation in South Africa is generally satisfactory despite minor inadequacies. Furthermore, the following can be deduced about the quality of public participation processes in the above-mentioned studies; (i) different views emanating from public participation processes resulted in hostility which greatly affected the entire process (Markowitz, 2016); (ii) stakeholders who are outspoken and with more technical expertise side-lined the marginalised members of the public (Hoosen, 2010); (iii) most stakeholders were of the view that public participation was supposed to directly benefit them through their inputs and concerns (Markowitz, 2016); (iii) timing of public participation is very crucial as most developers tend to involve the public at the implementation phases of the project (Schoeman, 2017); (iv) the effectiveness of public participation is not directly related to the methods used but the objectives of the process (Hoosen, 2010); (v) the public do not necessarily influence the final decision as the comments and concerns of stakeholders are not always taken into consideration (Kruger and McDaid, 2005); (vi) Mnengwane (2014) maintains that public participation enhances decision making; and (vi) the involvement of stakeholders prior to the undertaking of EIAs has been perceived as an effective tool to enhancing public participation (Schoeman, 2017).

2.4 LEGAL REQUIREMENTS, POLICIES, FRAMEWORKS AND INTERNATIONAL GUIDELINES

2.4.1 *International Treaties*

Various studies have been undertaken both locally and internationally assessing the process of public participation in Environmental Impact Assessments (EIAs) for various development projects (Del Furia and Wallace-Jones, 2000; Baker and McLelland, 2003; Wiseman and Rossouw, 2004; Hartley and Wood, 2005; Hoffman, 2007; Du Plessis, 2008; Murombo, 2008; O'Faircheallaigh, 2010; Hoosen, 2010; Nadeem and Fischer, 2011; Li et al., 2012; Houderquin et al., 2012; Kruger, 2012; Warburton, 2014; Thorpe, 2014; Udofia et al., 2016; Markowitz, 2016; Brombal et al., 2017; Schoeman, 2017). These studies provided varying views on the effectiveness, perception, importance and quality of public participation within EIAs. However, these studies concurred with the view expressed in international treaties and planning tools such as the Rio Declaration, the Aarhus Convention and Agenda 21 regarding the importance of incorporating public participation in environmental decision-making processes.

The relationship between development and environment was established at the United Nations (UN) Conference held at Stockholm in 1972 on the Human Environment (Anago, 2002). Recognising this relationship has resulted in the realisation that environmental issues are not localised but international (Anago, 2002). This realisation has led to an increased understanding of the human impacts on the environment (Anago, 2002). Additionally, one of the outcomes of the UN Conference on Environment and Development held in 1992, commonly known as the 'Earth Summit' at Rio de Janeiro was the action plan for sustainable development in the 21st century (Anago, 2002). This action plan has been adopted by most countries in the development of environmental policies (Anago, 2002). The Brundtland Commission describes sustainable development as "development which provides the needs of the current generation without compromising those of future generations" (Brundtland; 1987; Brundtland; 1991; Phillips, 2011; Wahaab; 2003). The World Bank also embraces the so-called "environmentally sustainable development", and is construed to have three interconnected aspects i.e. economic & financial sustainability, ecological sustainability and social sustainability (World-Bank, 1995).

The need for having a common view with regards to the conservation and enhancement of the environment was highlighted by the Stockholm Declaration which also identified ideologies for the conservation of natural resources (Economic Commission for Africa, 2005; Centre for Environmental Rights 2013). Although, the concept of Environmental Impact Assessments (EIA) was not addressed at the time, this declaration introduced the concept of sustainable development which resulted in the establishment and consideration of impact assessment in later international agreements (Economic Commission for Africa, 2005; Centre for Environmental Rights 2013). The requirement for reasonable and holistic planning is embedded in Principles 13 and 14 of the declaration (Economic Commission for Africa, 2005; Centre for Environmental Rights 2013). The aspect of education is also included in the action plan on the man and environment and it recognises training of personnel in the procedures of including environmental matters into development planning (Economic Commission for Africa, 2005; Centre for Environmental Rights 2013). It also stipulates how to ascertain the economic and social cost-benefit relationships of alternative approaches (Economic Commission for Africa, 2005; Centre for Environmental Rights 2013).

Currently, there are different international policies and agreements consisting of various topics aimed at ensuring sustainable development (DEAT, 2005; Mnengwane, 2014). These include the Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Ramsar Convention; Convention on Wetlands of International

Importance, especially as Waterfowl Habitat; Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region (Nairobi Convention); Framework Convention on Climate Change (UNFCCC), New York, 1992, including the Kyoto Protocol, 1997, and the Paris Agreement, 2015; The World Heritage Convention, The Convention on the Conservation of Migratory Species of Wild Animals and The Convention of Biological Diversity; Espoo Convention (United Nations Economic Commission for Europe, 1991); Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (DEAT, 2005; Mnengwane, 2014).

The United Nations Economic Commission for Europe (UNECE or ECE) endorsed the Aarhus Convention in 1998 (United Nations Economic Commission for Europe, 1998; Bastidas, 2004; DEAT, 2005). The Aarhus Convention on access to information, public participation and access to justice in environmental matters, held in 1998; is commonly referred to as the Aarhus Convention (United Nations Economic Commission for Europe, 1998; Bastidas, 2004; DEAT, 2005). It emphasises that the involvement of citizens in decision-making processes is significant in ensuring that issues, comments and concerns of various stakeholders are taken into consideration (United Nations Economic Commission for Europe, 1998; Bastidas, 2004; DEAT, 2005). This convention played a significant role in modelling the public participation process globally (Murombo, 2008). The convention maintains that for public participation to be effective; stakeholders must be involved at the earliest stages of the project; information must be easily accessible; timeframes within which stakeholders are required to provide inputs must be stipulated; and inputs from various stakeholders must be taken into consideration (Bastidas, 2004; Hartley and Wood, 2005; DEAT, 2005).

Provision of relevant information on environmental issues, stakeholder engagement in environmental decision-making processes and accessibility of courts and/ or environmental boards are the basis on which the Aarhus convention was formed which stemmed from the Rio Declaration (United Nations Economic Commission for Europe, 1998; Bastidas, 2004; DEAT, 2005). The conditions for ensuring effective public participation are provided for in Article 6 of the convention and can be summed up as follows; scheduling of the process and early involvement is urged; transparency and provision of information; timeous responses; active involvement of participants; consideration and incorporation of the views, concerns and issues raised by various participant's (United Nations Economic Commission for Europe, 1998; Bastidas, 2004; DEAT, 2005; Hartley and Wood, 2005; Mnengwane, 2014).

For Example, the Aarhus Convention has been widely used in Slovakia by the courts to resolve matters resulting from environmental disputes. It was ruled that although public participation is not expressed in mining regulations it must be interpreted in accordance with the Aarhus Convention (Justice and Environment, 2017).

2.4.2 South African Legislation

The first legal framework aimed at conserving the environment in South Africa (SA) was the Irrigation and Conservation of Water Act (Act No. 8 of 1912) enacted by the apartheid government in 1912 (Rabie and Fuggle, 1996; Mngoma, 2010). This act was however repealed by the Environment Conservation Act (ECA) (Act No. 73 of 1989) in 1989 due to its inability to adequately address environmental impacts (Rabie and Fuggle, 1996; Mngoma, 2010). Glazewski (2005) on the other hand, argues that the first act devoted to the management of the environment in SA was the ECA (Glazewski, 2005; Mngoma, 2010). One of the shortfalls of the ECA was that it only focused on the coordination of matters relating to the environment within government and did not incorporate any aspects deemed essential to achieve integrated environmental management (Glazewski, 2005; Mngoma, 2010). A new dawn came in South Africa in 1994, whereby apartheid laws were repealed with the aim of redressing past injustices (Wiseman and Rossouw, 2004; Hoosen, 2010). This era saw the inclusion of social and environmental justice in law and associated regulations (Wiseman and Rossouw, 2004; Hoosen, 2010).

Public participation during the apartheid era was mainly limited to the involvement of white people, thus excluding inhabitants from the Indian, Black and Coloured communities (Rossouw and Wiseman, 2004; Nyalunga, 2006; Schoeman, 2017). Those affected by the developments were thus not always given an opportunity to participate in the relevant decisions (Scott and Oelofse, 2005; Schoeman, 2017). Scott and Oelofse (2005) refers to these as the “invisible stakeholders”. The new legislative and administrative arrangements for environmental governance in South Africa follow the constitutional vision based on social justice and improved quality of life for all citizens (Gutto 2001; Mngoma, 2010). Public participation is thus aimed at allowing all South Africans to be part of the decision-making process at the plan, programme and project levels (Hossen, 2010; Mngoma, 2010). It is aimed at achieving social justice as it is impractical to separate developmental issues from issues of governance and civil society (Hossen, 2010; Mngoma, 2010).

2.4.2.1 The National Environment Conservation Act (Act No. 73 of 1989)

The undertaking of Environmental Impact Assessments (EIAs) in South Africa dates to the early 1970s (Wiseman and Rossouw, 2004; Schoeman, 2017). A document titled “Integrated Environmental Management in South Africa” was published by the Council of Environment and the EIA committee (Wiseman and Rossouw, 2004; Schoeman, 2017). The concept of Integrated Environmental Management (IEM) promotes a combined and holistic environmental management and decision-making processes in South Africa (SA) (Wiseman and Rossouw, 2004; Scott and Oelofse, 2005; Schoeman, 2017). Voluntary EIAs were the first approach to environmental management in South Africa (Duthie, 2001; Schoeman, 2017). Specific procedures for the undertaking of EIAs did not exist as EIAs were voluntary and administrative systems and they were not robust at the time (DEAT, 2004). Stakeholders only became more aware of the tools available in EIAs in 1992 following the publishing of Environmental Management Guideline Series by the Department of Environmental Affairs and Tourism (DEAT) (DEAT, 2004; Schoeman, 2017). The promulgation of the Environmental Conservation Act (ECA) (Act No. 73 of 1989) in 1989 led to EIAs being mandatory (Schoeman, 2017). The first set of EIA regulations were promulgated in 1997. A list of activities which may have detrimental impacts on the environment are provided in Section 21 of ECA, and these were further sub-divided into 11 categories. The ECA was however repealed when the National Environmental Management Act (NEMA) (Act No. 107 of 1998) was promulgated in 1998.

2.4.2.2 Constitution of the Republic of South Africa Act 108 of 1996 as amended

The consideration of social impacts, public concerns and views was only incorporated in the South African regulatory system post 1994 during the repeal of the old apartheid laws (Hoosen, 2010; Schoeman, 2017). The new government aimed at including the public in all decision-making processes to promote democratisation of the South African society (Schoeman, 2017). The Constitution of the Republic of South Africa (Constitution) (Act no. 108 of 1996) is the most important watershed law in the country and was promulgated in 1996 (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). The Constitution secures fundamental human rights and provides guiding principles for citizens (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). With this new Constitution, several acts and policies were introduced (Mnengwane, 2014). These were aimed at achieving the requirements for Environmental Impact Assessments (EIA) in South Africa in accordance with various international policies and agreements (Mnengwane, 2014). The focus on public participation thus shifted significantly with the realisation of the

significance of including the public during the design, planning and implementation of development proposals (Nyalunga, 2006, Schoeman 2017).

The recognition of a healthy environment as a basic human right is provided for in Chapter 2 of the Constitution (Murombo, 2008; van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). Chapter 2, Section 24 of the Constitution states that:

“everyone has the right (a) to an environment that is not harmful to their health or wellbeing; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that (i) prevent pollution and ecological degradation; (ii) promote conservation; and (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development”

(Source: van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010).

Section 24 of the Constitution thus provides for environmental obligations (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). In this way, environmental legislation was firmly included within the South African judiciary system (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). Section 32 of the Constitution states that:

“that citizens have an obligation to obtain any information held by the government and that any information held by another person that is needed for the implementation or safeguarding of any obligations”

(Source: van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010).

This Section also requires for laws and or policies to be promulgated to ensure the effectiveness of this right and to provide feasible methods to improve the managerial and economic burden on government (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). In the implementation of these mandates, state agencies have reviewed and proclaimed different laws relating to a variety of provisions such as management of the environment; environmental impact assessments; access to information; and administrative justice etc. (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010).

2.4.2.3 White Paper on Environmental Management Policy, 1997

The White Paper on Environmental Management in South Africa published in 1997 was aimed at ensuring the realisation of the commitments included in Principle 17 of the Rio

summit held in 1992 (DEAT, 1997). Principle 17 acknowledged and committed to ensuring the implementation of Environmental Impact Assessment in different countries including South Africa (International Association for Impact Assessments, 2000). The establishment of the environmental management policy was an attempt to ensure the implementation of environmental rights as provided for in the Constitution (Schoeman, 2017). The lack of robust environmental legislation at the time, inspired the establishment of environmental policies such as the White Paper on Environmental Management Policy (Schoeman, 2017). This policy made provision for public participation in environmental decision-making processes (Schoeman, 2017). Principles and objectives were established and outlined in the White Paper, and this led to the development of a framework for environmental management (Schoeman, 2017).

2.4.4.4 The National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) as amended

The Consultative National Environmental Policy Process (CONNEPP) which was aimed at protecting stakeholder's comments in the developments of new policies was initiated in 1995 (Mnengwane, 2014). This led to the promulgation of the National Environmental Management Act (NEMA) (Act No. 107 of 1998) in 1998 (Mnengwane, 2014). The National Environmental Management Act (NEMA) is the primary statute that assures the protection of environmental rights as included in Chapter 2, Section 24 of the Constitution (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). The NEMA sets out essential principles applicable to decision making relating to any matters affecting the environment, some of which were derived from international environmental laws and some from the constitution (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). The NEMA also attempts to reassure the government's obligation towards the protection of the environment (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010).

This statute also introduces collaborative governance in all matters affecting the environment by instituting essential organisations that are aimed at ensuring proper enactment of environmental protection (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). The NEMA provides for reasonable decision making in all factors affecting the environment and reconciliation and adjudication of conflicts (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). This law also requires the promulgation of EIAs as part of the integrated environmental governance (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010).

Chapter 1, Section 2 of the act provides principles which must be adhered to in all decisions made during the EIA process (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). These principles must be complied with when EIAs are undertaken in order to ascertain that the decision-making process is well informed (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). The endorsement of socio-economic sustainable development is the fundamental principle of NEMA (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). The promotion of an effective stakeholder engagement is one of the principles of NEMA which is also regarded as one of the significant decision-making tools (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). S2(4)(f) provides for the encouragement of public involvement in all matters affecting the environment (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). This Section also promotes the capacitation and up skilling of various stakeholders to ensure the effective public participation (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010).

S23(2)(d) forms part of the objectives of Integrated Environmental Management (IEM) is aimed at ensuring the adequacy and suitable involvement of stakeholders in all decisions that may affect the environment (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). Furthermore, the process required for investigating, assessing and communicating the likely impacts which may result from development proposals must be inclusive of a platform for involving stakeholders with an opportunity to provide inputs (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010). S24(4)(a)(v) outlines the methodology for undertaking the environmental impact assessment which is inclusive of public participation process (van der Linde and Feris, 2010; Hoosen, 2010; Paterson and Kotzé, 2010).

2.4.4.5 Environmental Impact Assessment Regulations

The application of Environmental Impact Assessments is specified in Chapter 5, Section 24 of NEMA (van der Linde and Feris, 2010; Hoosen, 2010; Mnegwane, 2014). On 21st April 2006, the Minister of the Department of Water and Environmental Affairs (DWEA, now known as the Department of Environmental Affairs (DEA) and the Department of Water and Sanitation (DWS) separately) promulgated code of practise in terms of Chapter 5 of NEMA (Aregbeshola, 2009; Hoosen, 2010). The NEMA EIA Regulations define two broad processes for an EIA, namely: (i) Basic Assessments (BA) and (ii) Scoping and Environmental Impact Reporting (S&EIR) (Aucamp, 2009; Glasson et al., 2005, Li, 2008). S&EIR entails development proposals which are likely to have significant detrimental

impacts on the bio-physical environment and requires further specialist studies and assessments as the likely effects are often not easily predictable (Aucamp, 2009). Basic Assessment processes entails EIA processes with impacts which are easily predictable and are often smaller in magnitude and extent (Aucamp, 2009, Glasson et al., 2008; Li, 2008).

The NEMA EIA Regulations came into effect on the 3rd July 2006 and replaced the EIA Regulations that were promulgated in terms of the Environment Conservation Act in 1997 and introduced new provisions for Environmental Impact Assessments (EIAs) (van der Linde and Feris, 2010). Subsequently, the National Environmental Management Amendment Act was promulgated on 9th January 2009 and came into effect on 1st May 2009 (van der Linde and Feris, 2010). NEMAA made a number of significant amendments to the general provisions applicable to all EIAs. On 18th June 2010, the relevant Minister promulgated amended EIA Regulations in terms of Chapter 5 of NEMA. From the date of effect of these amended EIA Regulations, i.e. 2nd August 2010, these amended EIA Regulations replaced the previous EIA Regulations that were promulgated on the 21st April 2006 (Aregbeshola, 2009, Hoosen, 2010, van der Linde and Feris, 2010).

Unexpectedly, the 2006 EIA Regulations were followed by the new 2010 EIA regulations. Be that as it may, in 2014 on 08th December, new EIA Regulations came into effect and replaced the previous EIA Regulations of 18th June 2010. It must be noted that the amendments made to the public participation process between the two EIA regimes (2010 and 2014) are not significant. The timeframe in which stakeholders are afforded to provide comments on the Environmental Impact Assessment Reports (EIARs) is the only difference noted. Development proposals which trigger activities listed in terms of the EIA regulations require Environmental Authorisation before commencement (Hoosen, 2010). Similarly, public participation is an integral part of such EIA procedures; the goal being to attain and ensure representation in environmental decisions and sustainable development (Hoosen, 2010).

2.4.2.6 Promotion of Administrative Justice Act No.3 of 2000

The obligation to administrative fairness is provided for in the Bill of Rights (Section 33) and has been achieved through the Promotion to Administrative Justice Act (PAJA) (Act 3 of 2000) (Babour, 2007). This act is aimed at ensuring that the obligation to administrative action is legal, sensible and procedurally fair (Babour, 2007). This act is also aimed at ensuring that stakeholders are provided with written reasons for administrative action and that matters related thereof are addressed as prescribed in Section 33 of the Constitution of

South Africa (Act No. 108 of 1996) (Babour, 2007). PAJA is thus a piece of law which is aimed at improving government and citizen relations in that it encourages collaborative decision making (Babour, 2007). PAJA provides a platform for citizens to participate in decisions affecting them (Babour, 2007). PAJA also protects citizens from illegal, irrational and procedurally unjust administrative decisions (Babour, 2007).

The requirements of PAJA are relevant to all decisions made by state departments as they are the decision-making bodies (Babour, 2007). PAJA also provides measures that must be undertaken by state departments in decision making processes (Babour, 2007). A decision in which a state department does not consult with citizens and various stakeholders is deemed illegal, furthermore in any decision made by state departments reasons must be provided on how the decision was reached and how concerns/opinions and issues raised were addressed (Babour, 2007).

2.4.2.6 Promotion of Access to Information Act 2 of 2000

The Promotion of Access to Information Act (PAIA) (Act No. 2 of 2000) ensures that the constitutional right to access to any information held by the government and any other person which is vital for the safeguarding of human rights is achieved (Babour, 2007). PAIA provides citizens with the right to apply to request information from the PAIA official of a state department or private institution (Babour, 2007). In terms of PAIA, all private and public organs are required to compile a PAIA handbook (Babour, 2007).

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CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Globally, several guidelines, criteria or codes of good practice and review packages are employed for the evaluation of the completeness and quality of EIA reports (Lee and Colley, 1991, Lee et al., 1999; George, 2000; Wood, 2003; Kruger and Chapman, 2005; Pinho et al., 2007; Thorpe, 2014). These instruments comprise the European Commission (EC) Criteria, 2001, the Oxford Brooks University Review Package as well as the Lee and Colley Review Package (Lee and Colley, 1991, Lee et al., 1999; George, 2000; Wood, 2000; Pinho et al., 2007; Kruger, 2012; Thorpe, 2014). Some of these review packages are based on international best practises and stipulate key information normally required when compiling EIA Reports (EIARs) or any documents supplementing the main environmental impact assessment (EIA) process (Lee and George, 2000; Simpson, 2001; Sandham et al., 2004; Sandham et al., 2005; Kruger, 2012; Thorpe, 2014). In most instances, legal and regulatory requirements of a country would form the basis of the evaluative criteria, thus enabling the reviewer to focus on relevant issues (Lee and George, 2000; Sandham et al., 2008; Mbhele; 2009; Thorpe; 2014).

Given the adaptability of the Lee and Colley Review Package and its role in analysing the quality of EIARs worldwide, it has been used in many EIA quality researches internationally (George, 2000; Lee and George, 2000; Kruger and Chapman, 2005; Hoffman, 2007; Sandham et al., 2008; Mbhele, 2009; Sandham et al., 2010; Kruger, 2012; Thorpe, 2014). In determining the quality of EIA public participation for selected mixed land-use developments in the Gauteng province, the Lee and Colley Review Package was adopted for this study by aligning it with criteria derived from the 2010 and 2014 EIA Regulations in South Africa. Furthermore, in South Africa, public participation during an EIA process is governed and managed by several legal and regulatory requirements (National Environmental Management Act (NEMA) (Act No. 107 of 1998); Promotion of Access to Administrative Justice (PAJA) (Act No. 2 of 2002) and several EIA Regulations (for example, 2006; 2010; 2014; and 2017). Basically, public participation in South Africa is compulsory for all EIA processes and is deemed so significant that it is the only requirement for which an exemption or exclusion cannot be granted by competent authorities. Chapter 5 (Integrated Environmental Management), Section 23(2) (d) in NEMA (Act No 107 of 1998) provides for

the promotion of satisfactory and appropriate public participation in all environmental decision-making processes.

3.2 LEE AND COLLEY REVIEW PACKAGE

Originally, the Lee and Colley Review Package was specifically designed for the quality appraisal of EIA reports in the United Kingdom (Lee and Colley, 1991, Lee et al., 1999; George, 2000; Sandham et al., 2005; Hoffman 2007; Kruger, 2012; Mounir, 2015; Sutton-Pryce 2015). This package is comprised of various criteria relevant for EIA quality review and is arranged in a four-level graded or hierarchical structure (George, 2000; Lee and George, 2000; Sandham et al., 2008; Mbhele, 2009; Sandham et al., 2010; Thorpe, 2014; Kruger, 2012) (Figure 3-1). The hierarchy consists of review areas, review categories and eventually review sub-categories (Lee and Colley, 1991, Lee and George, 2000; George, 2000; Simpson, 2001; Sandham et al., 2005; Hoffman 2007; Sandham et al., 2010; Mounir, 2015).

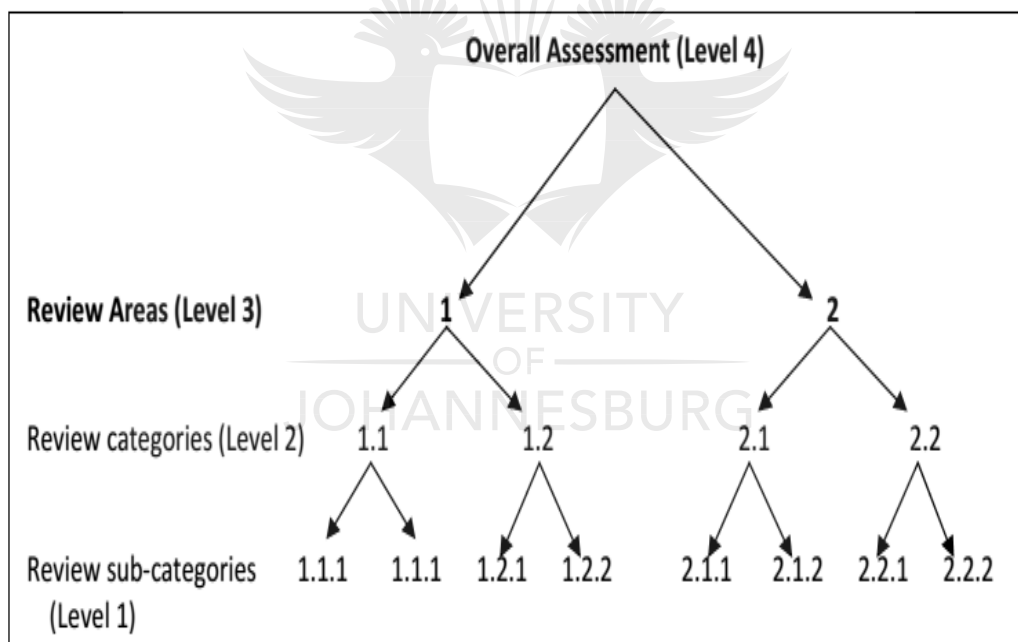


Figure 3.1: The hierarchical structure of the Lee and Colley review package (Lee et al., 1999).

For demonstration purposes, the review topics can be hierarchically set as shown in bulleted points below:

- **Review Area 1:** Description of the development, the local environment and the baseline conditions;

- **Review Area 2:** Identification and assessment of key impacts;
- **Review Area 3:** Alternatives and mitigation; and
- **Review Area 4:** Communication of results.

The actual quality review entails the evaluation of how satisfactory several environmental evaluation tasks (units and sub-units and areas) have been undertaken during the EIA process (George, 2000; Lee and George, 2000; Kruger and Chapman, 2005; Sandham et al., 2008; Mbhele, 2009; Sandham et al., 2010; Kruger, 2012; Thorpe, 2014; Sutton-Pryce 2015). Generally, the assessor begins the review of quality at the lowest level of the hierarchical structure and based on such reviews, higher levels are subsequently assessed (Moloto, 2005; van der Vyfer, 2008; Kruger, 2012; Thorpe, 2014). The level of quality that is assessed for any assessment during the EIA process is denoted by means of symbols ranging from “A” to “F” (George, 2000; Lee and George, 2000; Kruger and Chapman, 2005; Sandham et al., 2008; Mbhele, 2009; Sandham et al., 2010; Kruger, 2012; Thorpe, 2014). Table 3-1 explains the meaning of each quality symbol used in the Lee and Colley Review Package.

Table 3-1: List of quality symbols in the Lee and Coley Review Package (Lee et al., 1991).

Rating	Explanation
A	Generally well performed, no important tasks left incomplete
B	Generally satisfactory and complete, only minor omissions and inadequacies
C	Can be considered just satisfactory despite omissions and/or inadequacies
D	Parts are well attempted but must, as a whole be considered unsatisfactory because of omissions or inadequacies
E	Not satisfactory, significant omissions or inadequacies
F	Very unsatisfactory, important task(s) poorly done or attempted
N/A	Not applicable, the review topic is irrelevant in the context of this EIA report

Besides these symbols other researchers have used categories such as the following ones for summarising degrees of quality recorded during various researches they have undertaken: “A-C”; “D-F” (Simpson, 2001; Moloto, 2005; Van der Vyfer, 2008; Thorpe, 2014). Whereas the “A-C” category would entail satisfactory quality grades, “D-F” represents EIARS with generally unsatisfactory quality. Furthermore, as the reviewer works through the different hierarchical levels, notes are made meanwhile problem areas and tasks that have been carried out and presented satisfactorily are recorded on a collation sheet (George, 2000; Lee and George, 2000; Kruger and Chapman, 2005; Sandham et al., 2008; Mbhele, 2009; Sandham et al., 2010; Kruger, 2012; Thorpe, 2014). Such notes would later be used to explain the quality grades that are assigned as the quality appraisal is conducted.

Table 3-2: List of quality symbols in the adaptation of the original Lee and Coley Review Package (van der Vyfer, 2008).

Rating	Explanation
A-C	Reflects reports, review areas, categories and subcategories that are of a satisfactory quality
D-F	Reflects reports, review areas, categories and subcategories that are of unsatisfactory quality

In line with previous research (Lee et al., 1999; Peterson, 2010), in this study the Lee and Colley Review Package was applied by a research team of at least two independent evaluators who are acquainted with the procedural requirements of the Environmental Impact Assessment (EIA) process in South Africa and have practical experience with EIAs (Lee et al., 1999; Peterson, 2010). Such a reviewing process is known as the double review mechanism (Lee et al., 1999; Peterson, 2010). This independent review mechanism is undertaken to help avoid any bias that may surface during the evaluation process (Lee et al., 1999; Peterson, 2010). Thus, each reviewer did the evaluation independently and recorded the findings of the evaluation on the collation sheet (Lee et al., 1999; Peterson, 2010). Later on, the two evaluators met to discuss any variations that surfaced during the quality review and a final score was then assigned based on adjustments that were subsequently done as in related studies (Lee et al., 1999; Peterson, 2010). In this way, the scores given to various Review Areas and subsequent categories were validated for consistency.

3.3 PRIMARY DATA COLLECTION

Primary data was in the form of EIA Reports (EIARs) which were obtained from the Department of Agriculture and Rural Development (GDARD) in the Gauteng province in South Africa. This department is the competent authority for environmental authorisation of project proposals in the Gauteng province of South Africa. The EIARs that were examined in this study involved those that were comprised of a Scoping Report as well as an Environmental Impact Report (S&EIR).

Furthermore, two sets of EIARs were selected for evaluating the quality of their public participation processes – (i.e. those that were accepted and those that were rejected under the 2010 and 2014 EIA Regulations in the Gauteng province, respectively).

3.4 THE SAMPLING PROCEDURE

The modified Lee and Colley Review Criteria was applied to 20 randomly selected EIARs (i.e. 10 for each EIA regime) for mixed land-use developments in the Gauteng province. All

of the sampled EIARs had been submitted to the Gauteng Department of Agriculture and Rural Development (GDARD) and were evaluated for environmental authorization. They were further subdivided according to the following criteria:

- a. Ten EIARs based on selected mixed land-use developments in the Gauteng province were selected for this study. These reports were populated by respective environmental impact assessment practitioners (EAPs) in line with the 2010 EIA Regulations. Environmental authorisation (EA) was granted for five (5) of these reports and EA was rejected for the other 5.
- b. Another set of 10 EIARs undertaken in accordance with the 2014 EIA Regulations were selected for the same development proposals. Environmental authorisation was granted for five (5) of these reports and EA was rejected for the other 5.

3.5 MODIFIED LEE AND COLLEY REVIEW PACKAGE AND HYPOTHESES TESTING

As stated earlier, the original Lee and Colley Review Package was modified to review the quality of public participation with special reference to mixed-land use projects in the Gauteng province of South Africa. For the purpose of this study, quality denoted the extent to which the public participation process was conducted (actually documented) in terms of the prescribed minimum requirements for the public participation process in South Africa. The criteria that were used for quality evaluation are summarised in Table 3-3 and they are comprised of Review Areas; Review Categories; and lastly Review Sub-Categories. All of these criteria were developed in line with the minimum EIA requirements (Appendix 2) specified in the 2010 and 2014 EIA Regulations in South Africa.

Table 3-3: Review categories and associated sub-categories for the 2010 & 2014 EIA Regulations.

Review Area 1- Purpose of Public Participation	
1.1 Purpose of Public Participation	
1.1.1	Description and nature of the proposed development/activity
1.1.2	Location of Activity and any alternative site
1.1.3	List of Activities applied for and type of EIA process
1.1.4	Identification of Applicant
1.1.5	Identification and details of EAP
1.1.6	Consultation with stakeholders
1.1.7	Duration of Public Participation Process
1.1.8	Language proficiency

Review Area 2-Public Participation Process	
2.1 Public Participation Process	
2.1.1	On site notice
2.1.1.1	The site which the activity will be undertaken
2.1.1.2	Any Alternative site
2.2	Written notices
2.2.1	Occupiers of site and any alternative site
2.2.2	Owners or person in control of site and any alternative site
2.2.3	Adjacent Landowners/occupiers and any alternative site
2.2.4	Municipal Councillor
2.2.5	Local Municipality
2.2.6	Any organ of state having jurisdiction in respect of any aspect of activity
2.2.7	Any other party as required by the competent authority
2.3	Newspaper advertisement
2.3.1	One local newspaper or
2.3.2	Any official Gazette published for the purpose of providing public notice
2.3.3	Provincial or national newspaper if the activity extends beyond boundaries of metropolitan or district municipalities
2.4	Reasonable alternative methods to address illiteracy, disability or any other disability
2.4.1	Access to Environmental Impact Report
Review Area 3-Register of Interested and Affected Parties	
3.1. Register of Interested and Affected Parties	
3.1.1	All persons who have participated in the EIA process
3.1.2	All persons who have requested to be included in the register
3.1.3	All Organs of state which have jurisdiction in respect of the activity
Review Area 4-Comments of Interested and Affected Parties	
4.1 Comments of Interested and Affected Parties	
4.1.1	Written comments and issues
4.1.2	Written Responses
4.1.3	Copy of comments
4.1.4	Proof of responses

All the primary data generated on the various collations sheets for each EIAR whose quality was assessed, were analysed and the results were depicted by means of simple percentages (%) of satisfactory and unsatisfactory categories.

CHAPTER 4

RESEARCH FINDINGS

4.1 INTRODUCTION

This chapter provides an analysis of the degree to which the public participation process was conducted in 20 sampled Environmental Impact Assessment (EIA) reports. The study made the following findings: firstly, a distinction between the 2010 and 2014 EIA Regulations with regards to public participation was drawn; secondly, the quality of public participation in EIAs undertaken in terms of the 2010 and 2014 EIA Regulations was determined, and this ranged from satisfactory to unsatisfactory quality grades; thirdly, shortcomings and flaws that were identified during the quality evaluation of the public participation process were identified and lastly, areas requiring further improvements are highlighted.

4.2 DISTINCTION BETWEEN 2010 AND 2014 EIA REGULATIONS

Table 4-1 provides a summary of the main differences between the 2010 and 2014 EIA regulations. An assessment of the 2010 and the 2014 regulations shows that no remarkable amendments were made to the public participation process as far as these two regulations are concerned. The only notable variations lie in the timeframe wherein stakeholders are afforded the opportunity to comment on EIA reports. In terms of Regulation 56 of the 2010 EIA Regulations, registered Interested and Affected Parties are entitled to comment on all written submissions - drafts and final reports, within the timeframes that have been approved or set by the competent authority. Timeframes were determined by various competent authorities under the 2010 EIA regime. Furthermore, Regulation 56 (7) of the 2010 EIA Regulations states that organs of state who may have an interest or jurisdiction in the proposed development action are afforded 40 days to provide comments regarding the EIA process.

Regulation 40 (1) of the 2014 EIA Regulations stated that Interested and Affected Parties comprising of organs of state were to be afforded at least 30 days to comment on the EIA reports. In practice, all stakeholders are afforded 30 days to comment on draft reports in terms of the 2014 EIA Regulations. Final reports are therefore not circulated for comments but rather submitted to the competent authority for decision-making. Therefore, more time was afforded to stakeholders to comment on EIA reports under the 2010 EIA Regulations, and stakeholders were thus able to determine how their comments, inputs and concerns

were addressed in the final reports as well as their contributions towards the decision-making process.

Table 4-1: Differences between the 2010 and 2014 EIA Regulations.

2010 EIA Regulations	2014 EIA Regulations
Referred to as Environmental Impact Assessment Regulations, 2010 (GNR. 543).	Referred to as Environmental Impact Assessment Regulations, 2014 (GNR. 982).
EIA regulations include provisions for appeals provided for in Chapter 7 of GNR. 543.	EIA regulations do not make provisions for appeals. New appeal Regulations (GNR. 993) were published on 8 December 2018.
Timeframes were only compulsory for steps undertaken by competent authorities.	Applicants and competent authorities are bound by timeframes.
In cases where timeframes were not met, they were automatically extended by 60 days.	The EAP must submit a request for an extension where timeframes are not met and must be accompanied by a motivation for such requests.
Organs of state were afforded 40 days to comment during the public participation process.	Timeframe for public participation is 30 days for all Interested and Affected Parties (I&APs), including state departments.
Once a decision has been issued, the competent authority has 2 days to notify the applicant of its decision.	Once a decision has been issued, the competent authority has 5 days to notify the applicant of its decision.
Once the decision has been received, the applicant must notify all I&APs within 12 days, in writing.	Once the decision has been received, the applicant must notify all I&APs within 14 days, in writing.
Application fees were not applicable.	Application must be accompanied by a relevant fee where applicable.
Competent authorities were not expected to comment on draft reports.	It was mandatory for competent authorities to comment on draft reports.
It was not possible to refuse the scoping report during the S&EIR process.	It is possible to refuse the report at the scoping phase of the S&EIR process.
Provision for audits of Environmental Authorisations (EA) were not made.	Audit requirements became applicable to EAs issued under the 2014 EIA Regulations.
Written notices to landowners were required if the applicant is not a landowner.	Written consent of land owner is required if the applicant is not a landowner.
The competent authority may reject the application and request further information. Then the EAP was expected to re-submit subsequently to receiving communique from the competent authority.	The competent authority could refuse the EIA application. Provision was not made for the submission of additional information. The EAP could only resubmit an application once the appeal process had lapsed. The application would then be treated as a new submission.

4.3 QUALITY OF PUBLIC PARTICIPATION IN EIAs UNDERTAKEN IN TERMS OF THE 2010 AND 2014 EIA REGULATIONS

As mentioned in Chapter 3, 20 EIA reports were assessed for the quality of their documented public participation. The first ten EIA reports were conducted under the 2010 EIA Regulations, of which five were approved and five were not approved. The second batch of EIA reports belonged to the 2014 EIA Regulations and similarly, five were approved, whereas the other five were not approved. In Section 4.3.1, the quality of documented public participation according to the 2010 EIA Regulations is presented, whilst Section 4.3.2 focusses on the reports compiled according to the 2014 EIA Regulations.

4.3.1 QUALITY OF PUBLIC PARTICIPATION (2010 EIA REGULATIONS)

4.3.1.1 Analysis of Review Area 1

This section focuses on the ten EIA reports which were undertaken under the 2010 EIA Regulations and later on, the quality of the ten respective reports are explained. Results show that seventy percent (70%) of the ten (10) reviewed reports displayed a satisfactory quality ("A-C") while 30% were of unsatisfactory quality ("D-F") (Figure 4.1). Those reports that were assigned a satisfactory quality, met minimum requirements for EIA reporting despite minor omissions; whereas those that displayed an unsatisfactory quality contained major omissions.

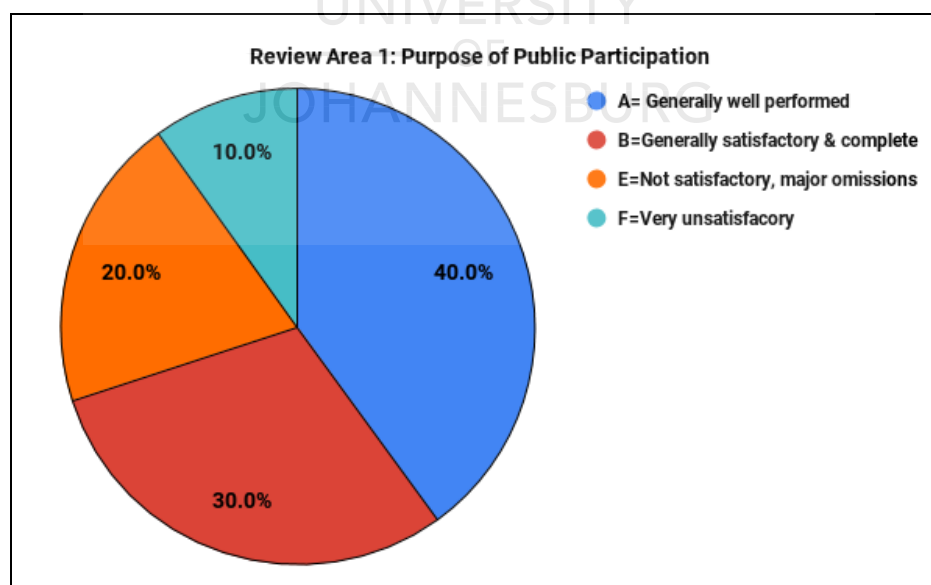


Figure 4.1: Review Area 1 - Purpose of Public Participation Process (10 EIARs).

As shown in Figure 4.2, one of the five (5) EIA reports for which environmental authorisation was granted, was found to be generally well done (“A”) in terms of the requirements specified under Review Sub-Category 1.1 (Purpose of public participation). Even so, legal compliance with the requirements for Review Sub-Category 1.1.2 (Location of activity and any alternative site) was deemed to be generally satisfactory and complete (“B”), although there were minor omissions and inadequacies. The Review Sub-Categories 1.1.5 (Identification and details of EAP) and 1.1.6 (Consultation with stakeholders) were mostly well executed (“A”) as all the reports were generally compiled adequately as the information provided was comprehensive enough for the competent authority to make an informed judgement. A total of four reports from various sub-categories, namely, one report from sub-category 1.1 (Purpose of public participation); two reports from sub-category 1.1.4 (Identification of applicant) and one report from sub-category 1.1.7 (Duration of public participation process) were found to be exceedingly unsatisfactorily (“F”) conducted due to lack of adequate information.

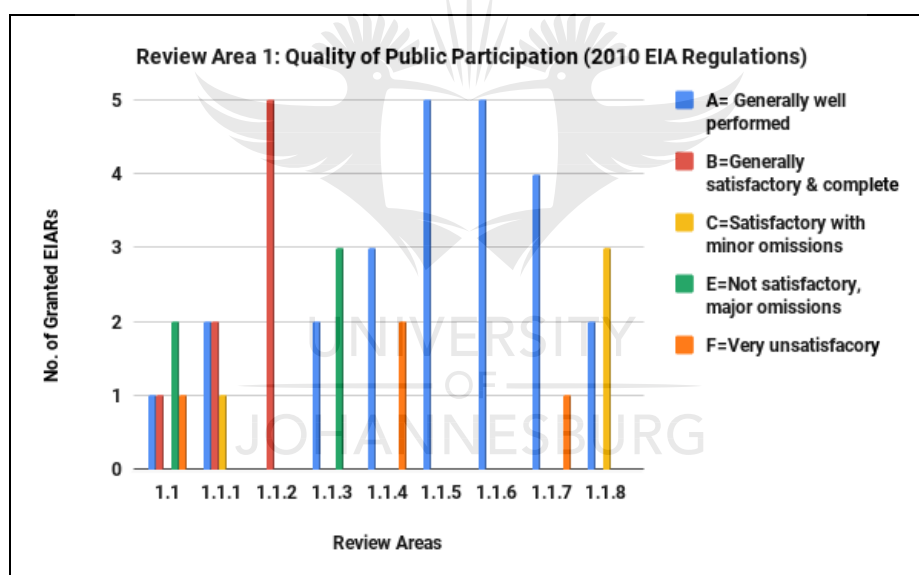


Figure 4.2: Review Area 1 – 2010 EIA reports that received positive environmental authorisation.

For EIA reports that did not receive positive environmental authorisation, their quality patterns are depicted in Figure 4.3. All five of the EIA reports for which environmental authorisation was denied or rejected by the competent authorities, were found to have been compiled adequately in comparison to those that received approval. As shown in Figure 4.3, the quality assigned for all relevant Review Sub-Categories ranged from “A” (Generally well performed, no important tasks left incomplete) to “B” (Generally satisfactory and complete,

with minor omissions and inadequacies). With this superior quality level (“A-B”), all the required information was duly provided.

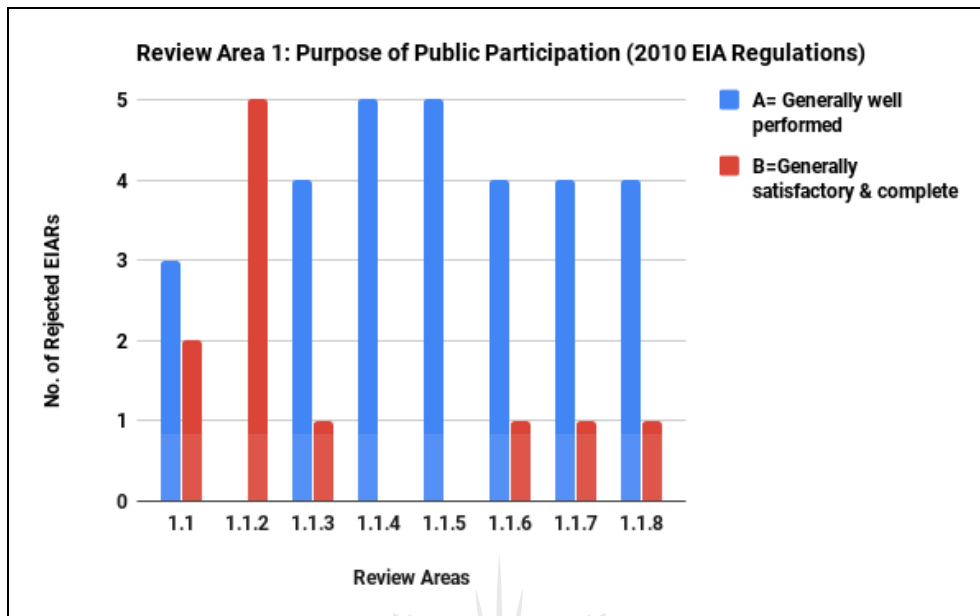


Figure 4.3: Review Area 1 – 2010 EIA reports that received negative environmental authorisation.

4.3.1.2 Analysis of Review Area 2

Review Area 2 relates to the ways and means required to notify Interested and Affected Parties on the public participation process regarding the EIA of development proposals; these include putting up site notices, providing a newspaper notification as well as issuing written communication to stakeholders. The public participation process was generally well executed as only 10% of the reports were of an unsatisfactory quality (“F”) (Figure 4.4). Omissions and deficiencies observed in this area included failure to provide written notices to occupiers of the sites and also in other alternative sites. Ninety percent (90%) of the reports had a satisfactory quality rating (“A-C”) given the correct processes that were being followed to notify and invite Interested and Affected Parties to participate in the environmental impact assessment process.

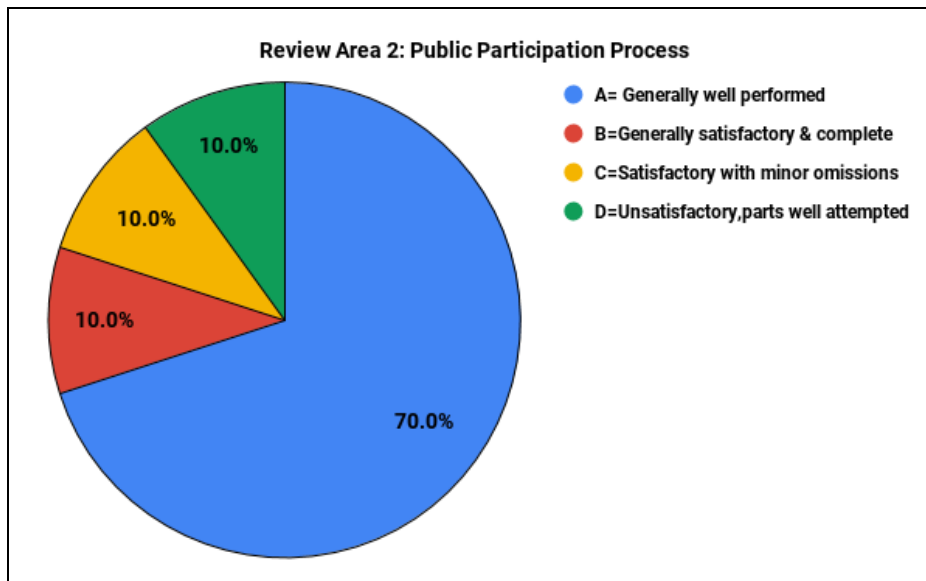


Figure 4.4: Review Area 2 - Public Participation Process (10 EIARS).

Review Area 2 is considered to have been generally well populated and executed in the five reports for which a positive environmental authorisation was issued, despite the minor omissions and deficiencies observed during the review process. Review Sub-Category 2.1.2 (Placing notices on selected sites where activities will be undertaken) was the most well performed of the 18 sub-categories, with 80% of these reports obtaining an “A” quality rating. This is because site notices informing adjacent landowners and residents on the proposed development were placed at various conspicuous locations in and around the project sites (Figure 4.5). Regarding the requirements for Review Sub-Category 2.4.1 (Access to the Environmental Impact Report), the reviewed EIARs exhibited satisfactory quality with four of the reports classified within the “A-C” quality rating. This is because these reports were made available on the websites of companies represented by the various environmental assessment practitioners. The reports were also accessible at local libraries and community centres, thus enabling any stakeholders to access them at any given time. As for Review Sub-Categories 2.3.2 (Any official Gazette published for providing public notice) and 2.3.3 (Provincial or national newspaper if the activity extends beyond boundaries of metropolitan or district municipalities) none of the EIARs obtained any quality ratings because these aspects were irrelevant.

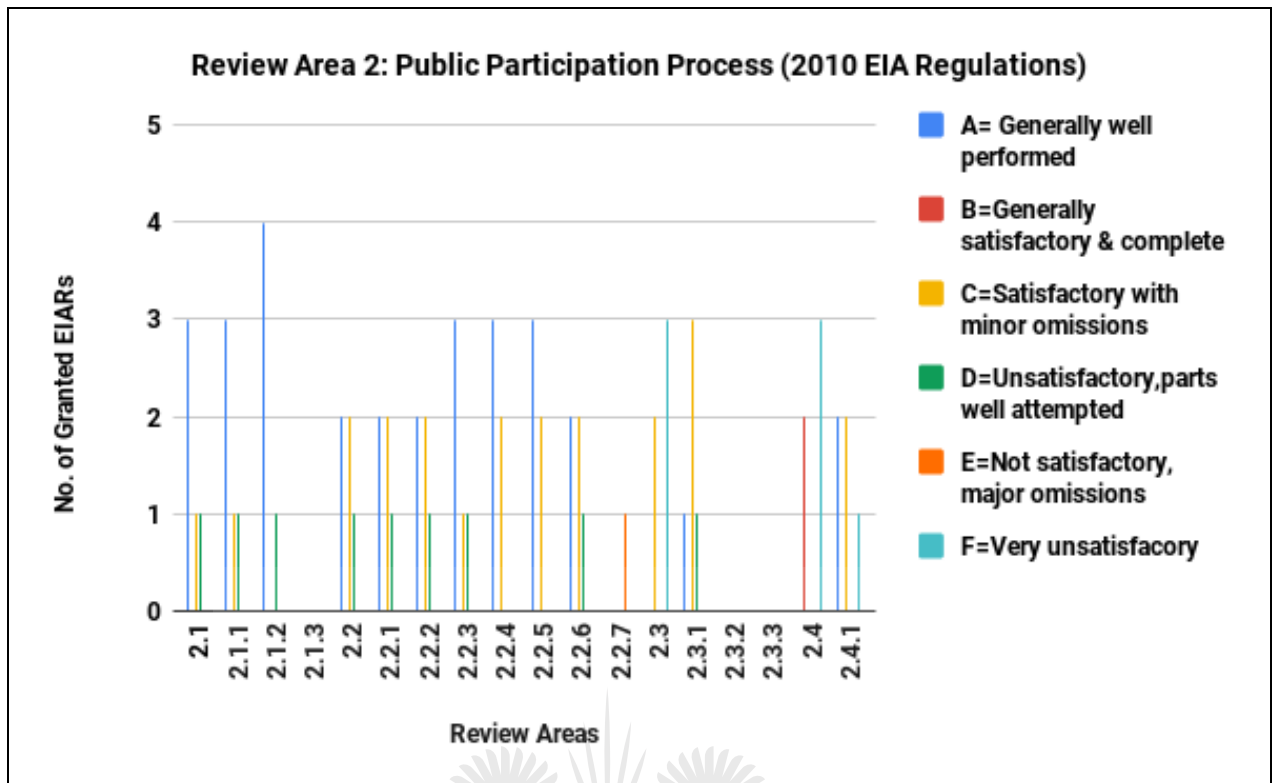


Figure 4.5: Review Area 2 – EIARs granted positive environmental authorisation (2010 Regulations).

Five of the reports for which environmental authorisation was rejected were generally well written with a quality rating ranging from “A-C”. Review Sub-Category 2.1.1 (On site notice) and 2.1.2 (The site where the activity will be undertaken) had the highest quality rating, with four reports obtaining an “A” rating and one report assigned a “B” rating (Figure 4.6). This is because the minimum requirements for undertaking public participation were complied with. The “C” quality rating is the lowest rating observed in this batch as certain reports had minor inadequacies but could still be considered satisfactory. This batch of reports were well executed in comparison to those that received positive environmental authorization.

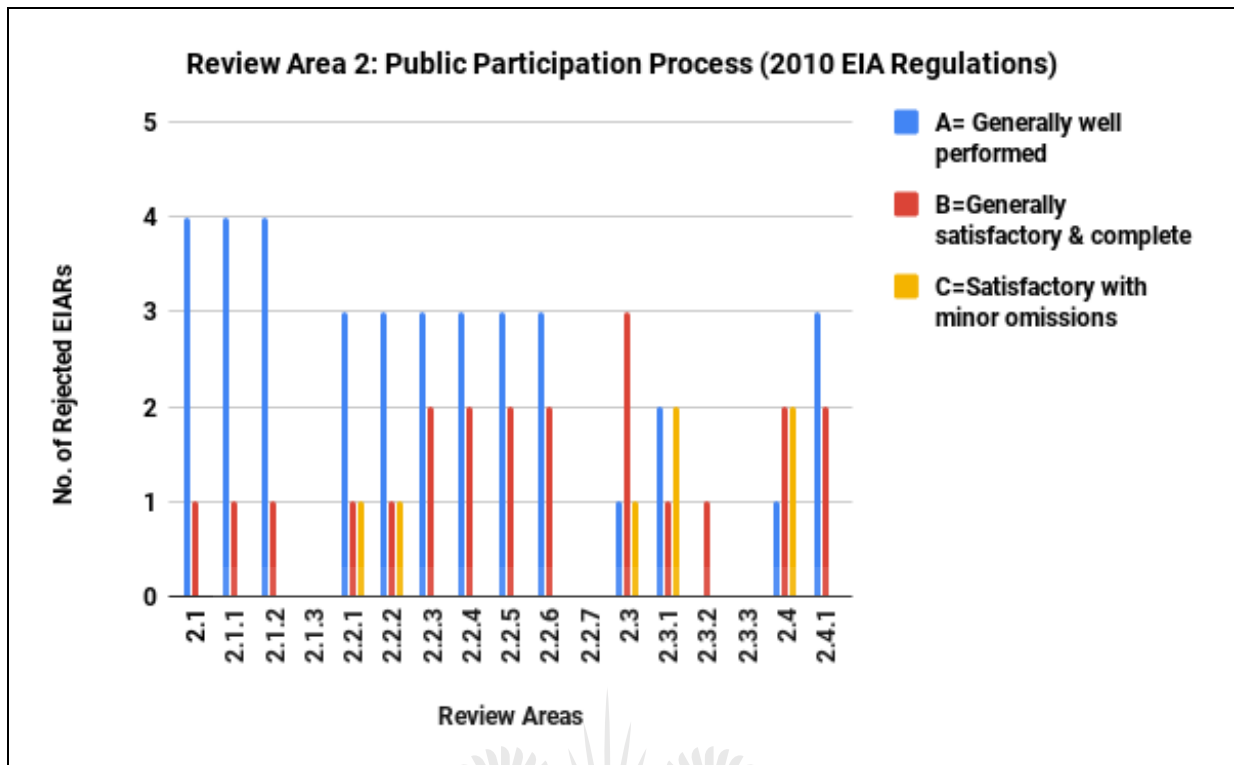


Figure 4.6: Review Area 2: EIARs granted negative environmental authorisation (2010 Regulations).

4.3.1.3 Analysis of Review Area 3

This review area requires that a register of Interested and Affected Parties be opened and maintained, and for a copy of this register to be attached to the report. This allows the competent authority to ascertain whether all relevant stakeholders have been included in the EIA process. The bulk (80%) of the reports were of a satisfactory quality ("A-B") and 10% of these were well compiled ("A") without glaring omissions and inadequacies. However, the remaining 70% were assigned a "B" rating as they displayed minor omissions (Figure 4.7). Twenty percent (20%) of the reports were exceedingly unsatisfactory ("F") as the stakeholder database did not include all the relevant stakeholders and some of the requests from stakeholders to be registered were not considered.

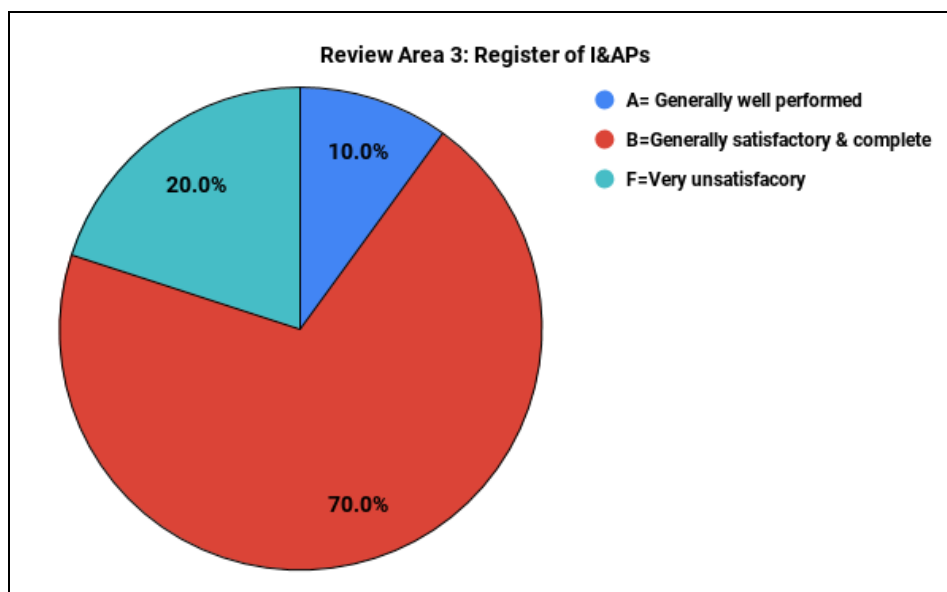


Figure 4.7: Review Area 3 - Register of Interested and Affected Parties (10 EIARs).

Three (3) of the 5 reports where environmental authorisation was granted were generally satisfactory and complete (“B”) in terms of Review Sub-Category 3.1.1 (Registration of all persons who have participated in the EIA process). Only two of the five reports included requests from stakeholders to be registered as Interested and Affected Parties in terms of Review Sub-Category 3.1.2 (Registration of all persons who have requested to be included in the register). This was exceedingly unsatisfactory (“F”) as these requests were not taken into consideration. Two of the five reports were also exceedingly unsatisfactorily written (“F”), as the stakeholder database did not reflect all the state departments having jurisdiction over the proposed developments (Figure 4.8).

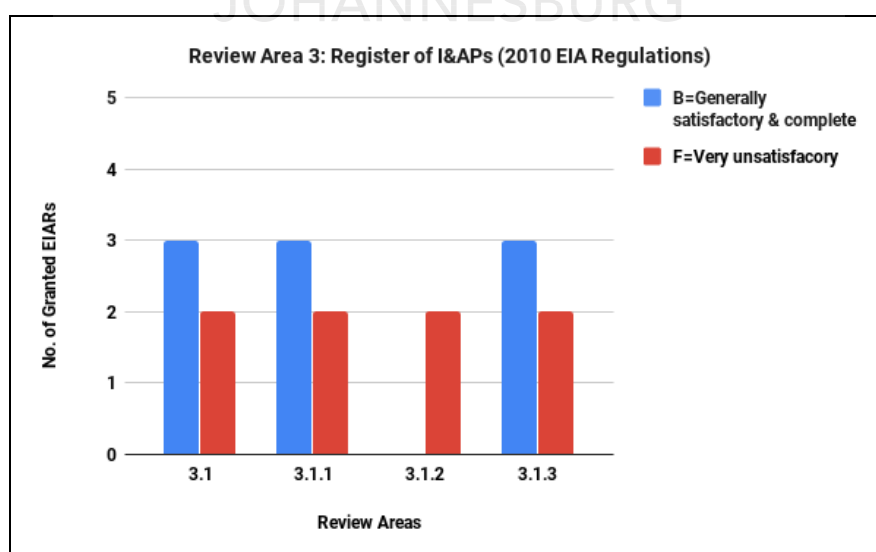


Figure 4.8: Review Area 3 - EIARs granted positive environmental authorisation (2010 Regulations).

The five reports that did not receive a positive environmental authorisation were of a satisfactory quality (“A-B”) (Figure 4.9), as all tasks were completed without any major inadequacies in terms of Review Area 3. Only one report was assessed for Review Sub-Category 3.1.2 (All persons who have requested to be included in the register) and it received an “A” rating (generally well performed, and no important tasks were incomplete).

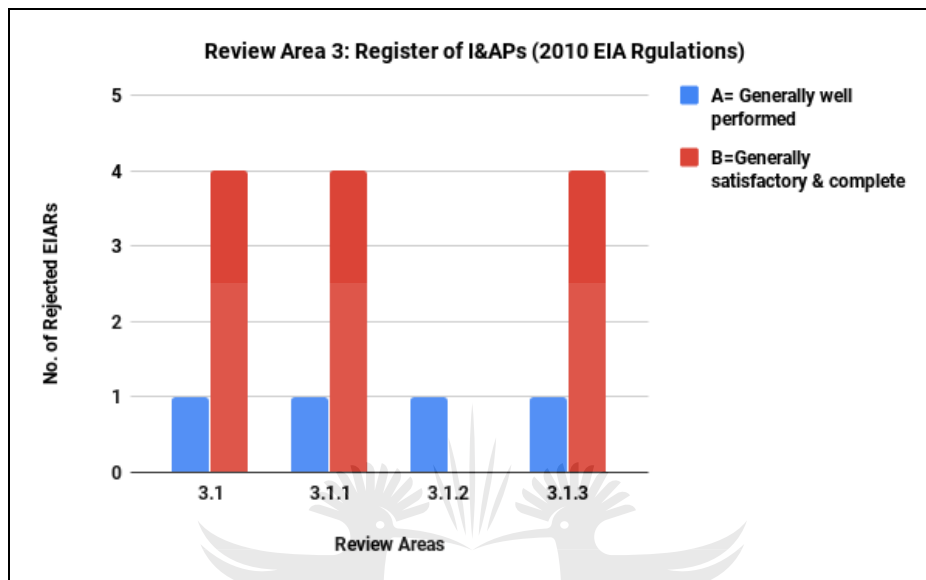


Figure 4.9: Review Area 3: EIARs granted negative environmental authorisation (2010 Regulations).

4.3.1.4 Analysis of Review Area 4

The requirements for Review Area 4 entails capturing comments raised by Interested and Affected Parties and providing appropriate responses to them. The comments and responses must be captured in a report commonly referred to as the comment and responses report. Copies of original comments and responses must also be included in the public participation report. Eighty percent (80%) of the reports were satisfactorily populated with an “A-B” rating as the comments raised were adequately addressed and related copies were also included. The other 20% of the reports were exceedingly unsatisfactory (“F”) as responses such as “noted” were provided where much information was required for issues that needed further clarity and deliberation (Figure 4.10).

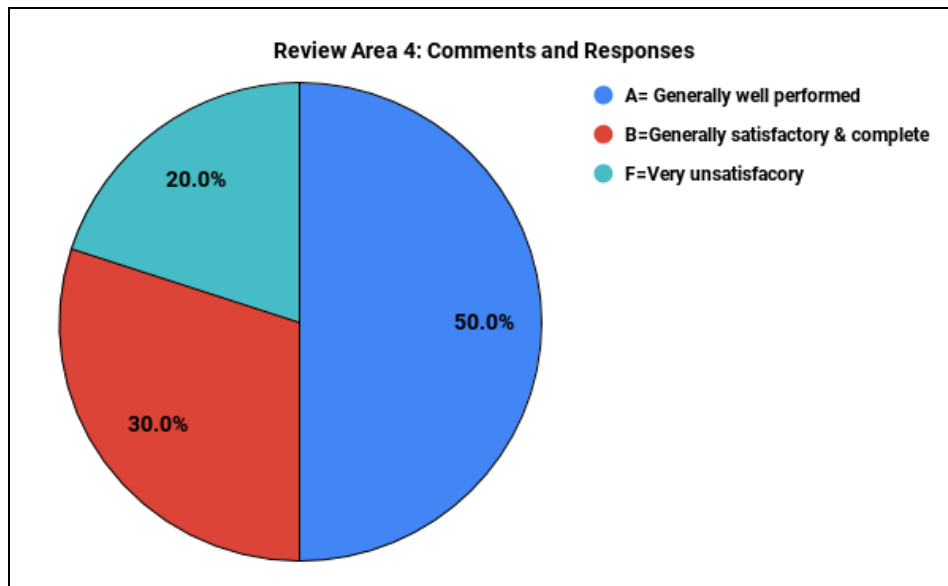


Figure 4.10: Review Area 4 - Comments and Responses Report (10 EIARs).

Five of the reports for which environmental authorisation was granted ranged from “A-B” ratings to “D-F” quality ratings. This is because not all the reports were well written. Three of the five reports were of a satisfactory quality (“A-B”) and two of the reports were exceedingly unsatisfactory (“F”) in terms of all Review Sub-Categories. This poor-quality rating is attributed to the failure of environmental assessment practitioners in not providing copies of the original comments and associated responses (Figure 4.11).

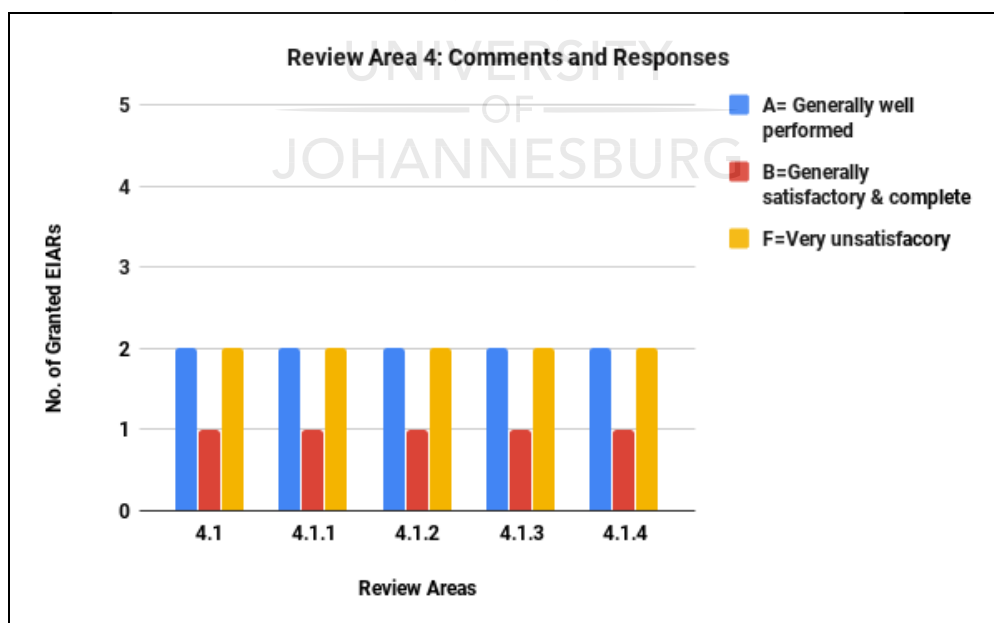


Figure 4.11: Review Area 4 - EIARs granted positive environmental authorisation (2010 Regulations).

In Figure 4.12, the results on the quality of EIARs that received negative environmental authorisation are exhibited. On the whole, these EIARs displayed a satisfactory quality rating (“A-B”). Such a quality assignment is because all comments were adequately addressed and copies of issues raised were clearly reflected in these reports. However, there were some minor omissions observed and these were ascribable to the inability of EAPs in responding satisfactorily to certain issues that were raised.

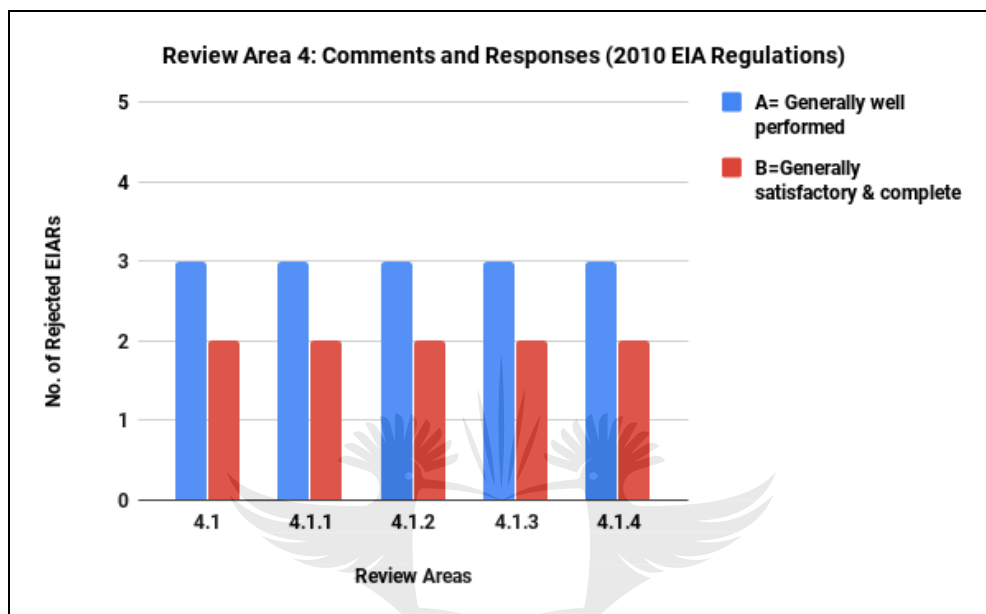


Figure 4.12: Review Area 4 - EIARs granted negative environmental authorisation (2010 Regulations).

4.3.2 Review Area 1: Purpose of Public Participation (2014 EIA Regulations)

4.3.2.1 Analysis of Review Area 1

This section focuses on EIARs which were carried out under the 2014 EIA Regulations. Ninety percent (90%) of these reports displayed a satisfactory quality (“A-B”), thus they were very well written in comparison to the reports undertaken under the 2010 EIA Regulations. Such superior quality rating results from the excellent manner in which the requirements for public participation were addressed. However, about 10% of the reports were of an unsatisfactory quality (“D-F”) as insufficient information was provided in order for the competent authority to make an informed decision (Figure 4.13).

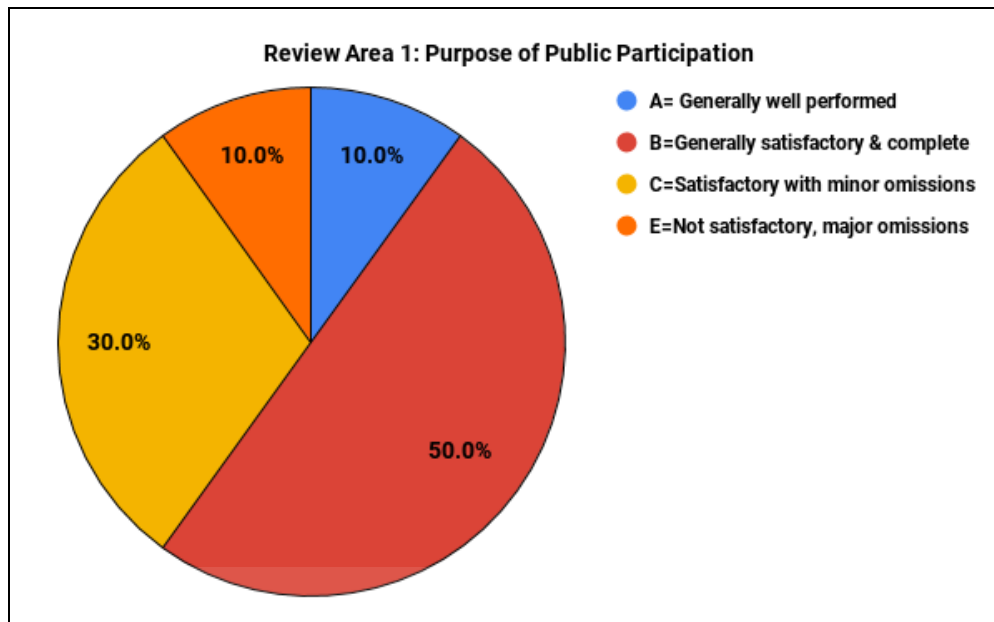


Figure 4.13: Review Area 1 - Purpose of Public Participation Process (10 EIARs).

The manner in which the information regarding the identification of applicants (Review Sub-Category 1.1.4) was provided in these EIARs was found to be generally well done (“A”) in five of the approved reports (Figure 4.14). All the other Review Sub-Categories (1.1, 1.1.1, 1.1.2, 1.1.3, 1.1.5; 1.1.6; 1.1.7 and 1.1.8) were dealt with to a satisfactory degree (“A-B”) with only one of the five reports displaying deficiencies and omissions in the above-mentioned Review Sub-Categories. Language proficiency (Review Sub-Category 1.1.8) is one of the areas where deficiencies and omissions (“E”) were observed. The use of appropriate language is one of the key instruments in facilitating the public participation process. Without proper language, EAPs will not be able to be understood by various stakeholders.

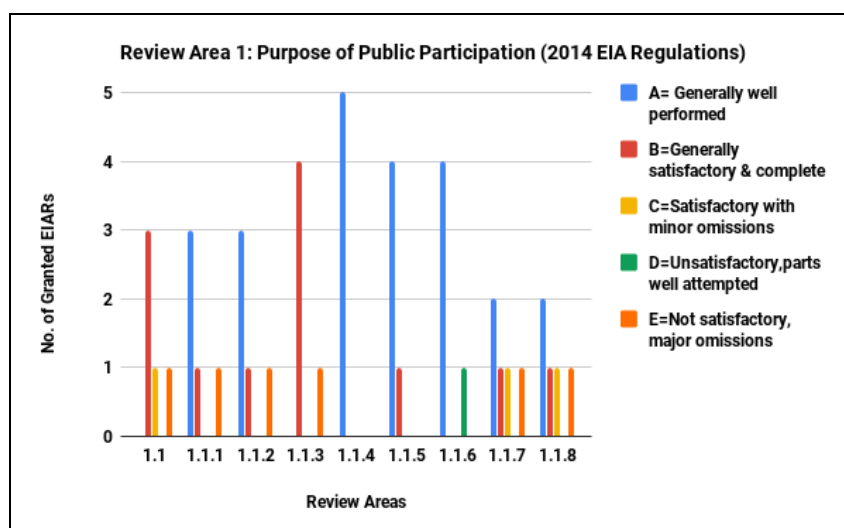


Figure 4.14: Review Area 1 - EIARs granted positive environmental authorisation (2014 Regulations).

Five of the EIA reports for which environmental authorisation was not approved were rated as generally satisfactory (“A-C”) (Figure 4.15). These EIARs were comparatively of a superior quality than those that were approved in terms of this Review Area. No reports were found to be lacking regarding the requirements for this Review Area. Review Sub-Categories 1.1.4 (Identification of applicant); 1.1.5 (Identification and details of EAP), and 1.1.7 (Duration of public participation process) were found to be the most well executed Review Sub-Categories with five of these EIARs rated as generally well compiled (“A”). Two of the reports were rated satisfactory (“C”) in terms of Review Sub-Category 1.1 (Purpose of public participation), as the purpose of undertaking public participation was clearly written, although there were minor inadequacies (Figure 4.15).

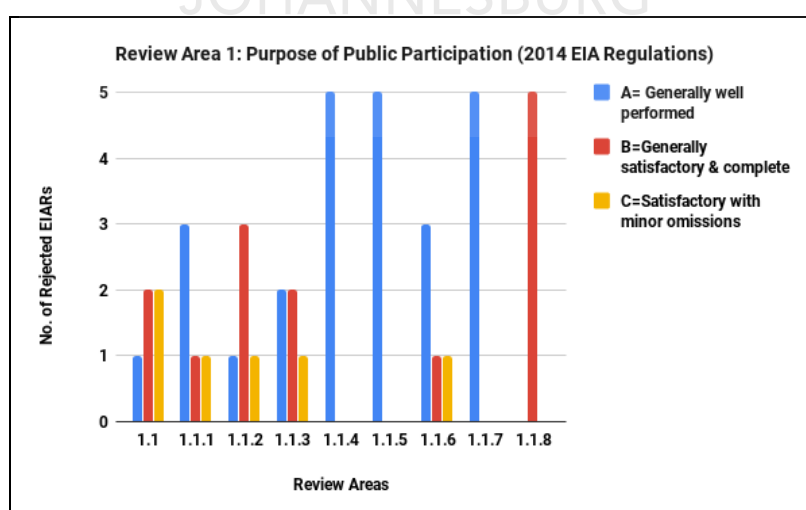


Figure 4.15: Review Area 1 - EIARs granted negative environmental authorisation (2014 Regulations).

4.3.2.2 Analysis of Review Area 2

Ninety percent (90%) of the EIARs in this Review Area displayed a satisfactory quality (“A-C”), with 10% of the reports reflecting an unsatisfactory quality (“D-F”) (Figure 4.16). Review Sub-Category 2.1.2 (Erection of site notice on site where the activity will be undertaken) was rated as satisfactory (“A-C”), making it the most well written Sub-Category (Figure 4.16). The following Review Sub-Categories were not rated in this research: 2.1.3 (Placing a site notice at any alternative site); 2.2.7 (Any other party as required by the competent authority); 2.3.2 (Any official Gazette published for the purpose of providing public notice), and 2.3.3 (Provincial or national newspaper if the activity extends beyond boundaries of metropolitan or district municipalities). This is because they were not applicable.

Furthermore, 70% of the same reports were rated as satisfactory (“C”) in terms of meeting requirements for Review Sub-Category 2.3.1 (i.e. placing a newspaper advertisement in one local newspaper). Although newspaper advertisements were placed, the publishing companies used were mainly national and commercially-based (i.e. The Star, the Sowetan, and the Daily Sun), of which none of them were community-based. Instead, there are community-based newspapers that can also be used for notifying the public on stakeholder engagement (i.e. the Randburg Reporter, Sandton Chronicles, and the Centurion Rekord).

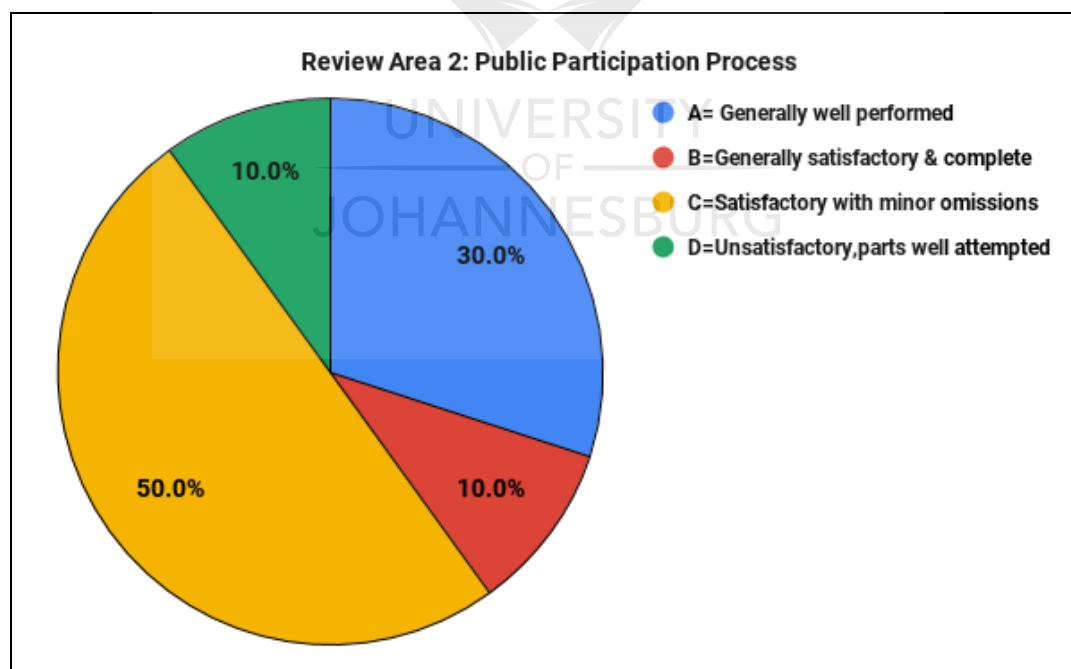


Figure 4.16: Review Area 2 - Public Participation Process (10 EIARS).

In terms of the 5 EIARs that received a positive environmental authorisation, the results are shown in Figure 4.17. For the requirements of Review Sub-Category 2.3 (Placement of the newspaper advertisement), the approved EIARs displayed satisfactory quality (“A-C”) ratings, making this aspect one of the most well written within Review Area 2. One out of 5 EIARs was not properly compiled (“E”) with regards to the requirements of Review Sub-Categories 2.4 (Providing reasonable alternative methods to address illiteracy, disability or any other disability) and 2.4.1 (Access to environmental impact report). However, the remaining 4 EIARs were well written (“A-C”).

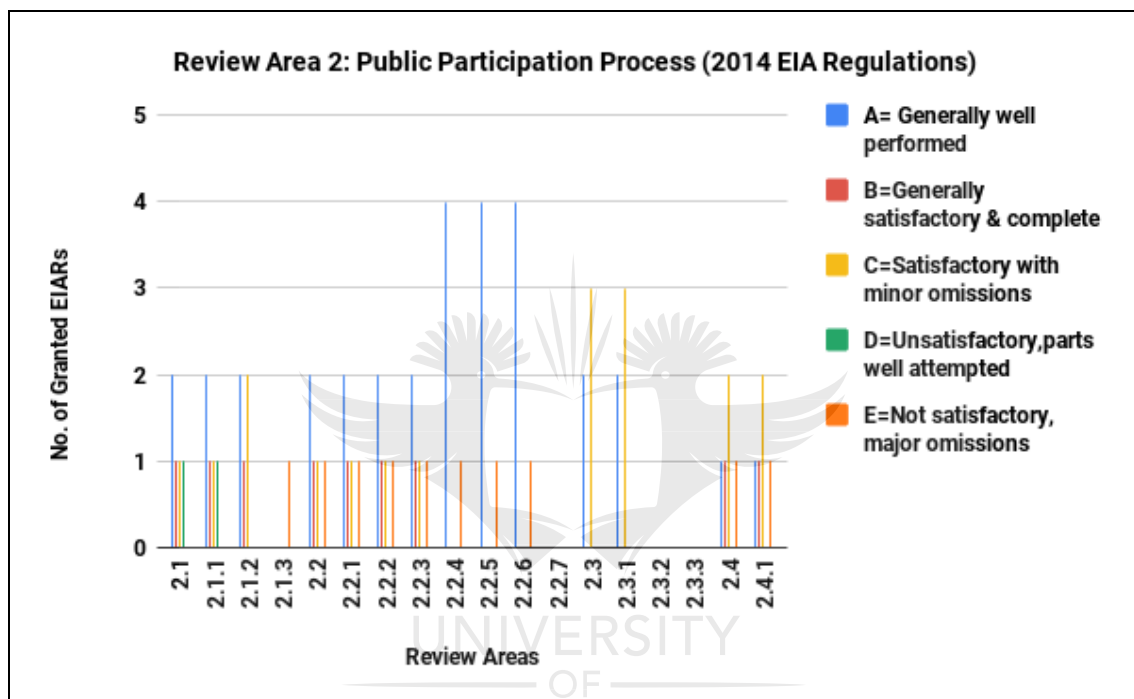


Figure 4.17: Review Area 2 - EIARs granted positive environmental authorisation (2014 Regulations).

Five of the reports which did not receive a positive environmental authorisation were well executed in comparison to those for which a positive environmental authorisation was issued. The reports were rated as satisfactory (“A-C”) and no omissions and inadequacies were observed (Figure 4.18), making this Review Area one of the most well compiled. Review Sub-Categories 2.1 (Public participation process), 2.1.1 (The erection of onsite notice) and 2.1.2 (Placing the site notice on the site where the activity will be undertaken) displayed similar higher ratings. For example, 3 of the reports were rated as satisfactory (“C”); 1 report was generally satisfactory (“B”); and another report was found to be of an “A” quality rating. The EAPs who were involved ensured that alternative means were provided to address any form of disability and illiteracy amongst the consulted stakeholders (Review Sub-Category 2.4) as all reports displayed a satisfactory quality rating (“A-C”).

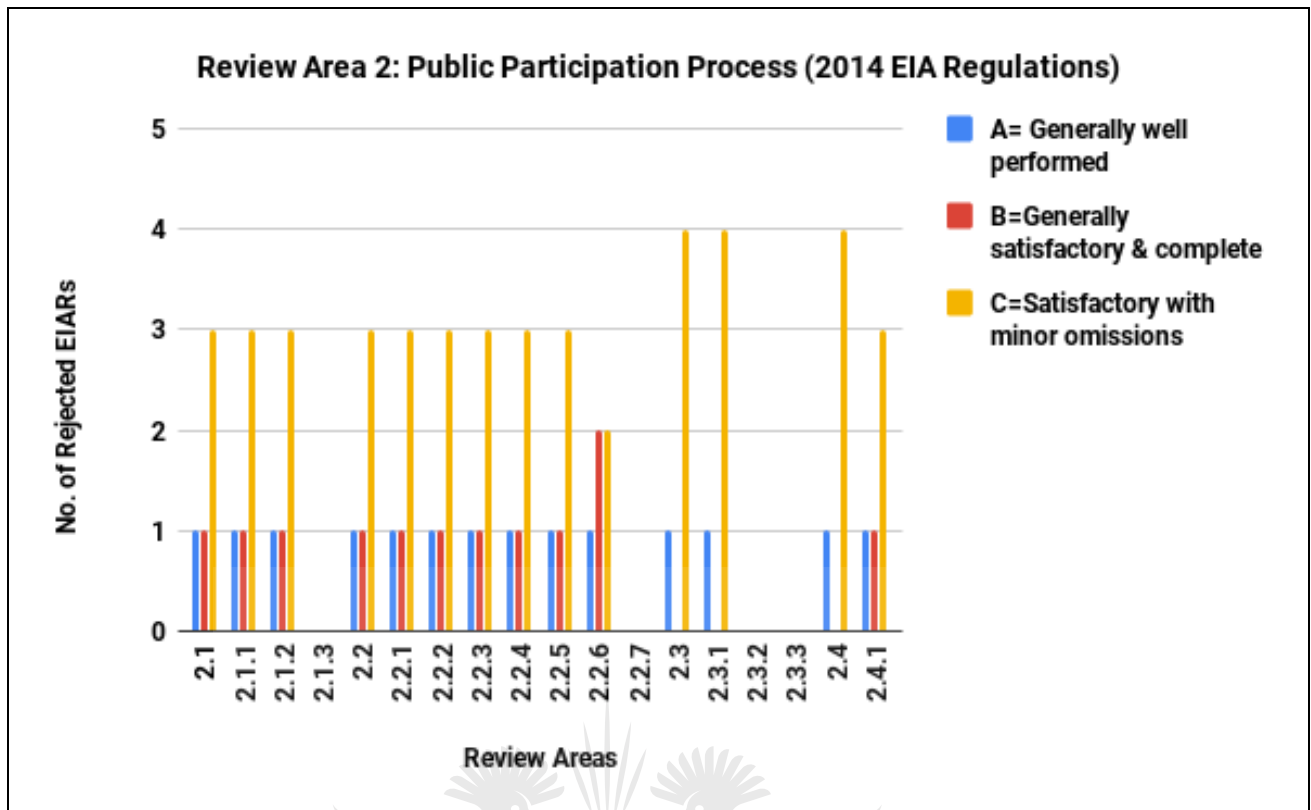


Figure 4.18: EIARs granted negative environmental authorisation (2014 Regulations).

4.3.2.3 Analysis of Review Area 3

This review category entails opening and maintaining a database of all Interested and Affected Parties; including state departments which may have jurisdiction over the proposed developments. All the 10 EIARs in this review category were rated as satisfactory (“A-C”) as no omissions and inadequacies were observed, making this batch well executed in comparison to the reports undertaken in terms of the 2010 EIA Regulations (Figure 4.19). Thirty percent (30%) of EIARs were generally well drafted (“A”) without any inadequacies and no important tasks left incomplete. Forty percent (40%) of the EIARs were rated generally satisfactory and complete (“B”) although minor omissions and inadequacies were observed. Lastly, the remaining 30% was comprised of EIARS that displayed satisfactory (“C”) quality despite some omissions and inadequacies. Although some minor omissions were observed, these were negligible as the information provided was sufficient for an informed decision-making process.

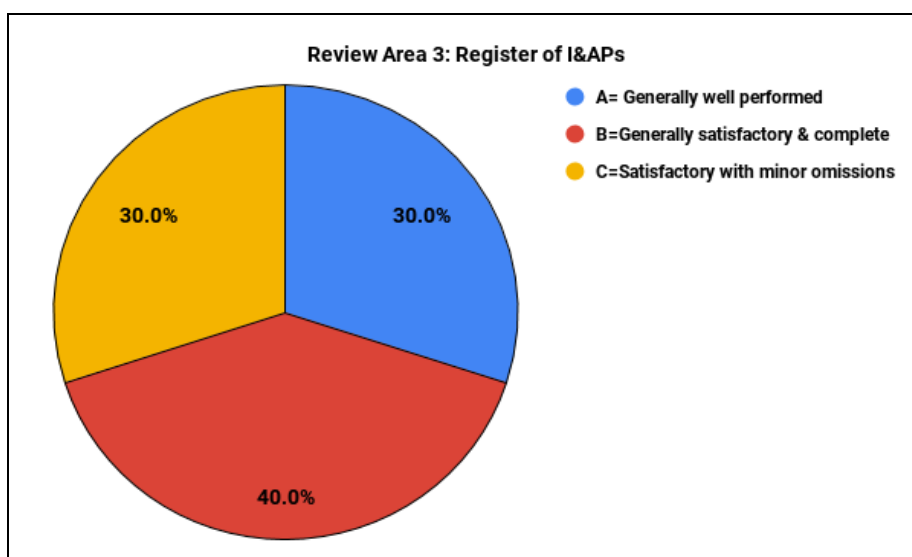


Figure 4.19: Review Area 3 - Register of Interested and Affected Parties (10 EIARs).

Five of the reviewed EIARs which received a positive environmental authorisation were rated as satisfactory (“A-C”) in terms of this Review Area (Figure 4.20). Review Sub-Categories 3.1 (Register of Interested and Affected Parties) and 3.1.3 (Registration of all organs of state which have jurisdiction in over the activity) displayed similar ratings; three of the reports were generally satisfactory and complete (“B”) and the other two reports were generally well performed (“A”). This is because no omissions were observed as the registers of Interested and Affected Parties were opened and maintained and included all organs of state which have jurisdiction on the proposed activities. The request by stakeholders to be included in the database (Review Sub-Category 3.1.2) was not rated as no requests were received from stakeholders.

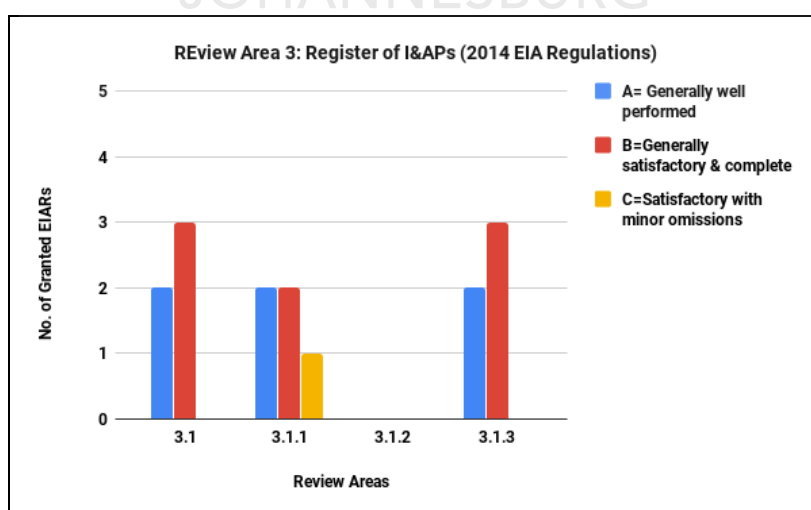


Figure 4.20: Review Area 3 - EIARs granted positive environmental authorisation (2014 Regulations).

Five of the reviewed EIARs which received a negative environmental authorisation were rated satisfactory (“A-C”) in terms of this Review Area (Figure 4.21). Review Sub-Categories 3.1 (Register of Interested and Affected Parties) and 3.1.3 (Registration of all organs of state which have jurisdiction in over the activity) indicated similar ratings. One of the reports was rated as generally satisfactory and complete (“B”) meanwhile another one was rated well executed (“A”). The other three reports were rated satisfactory (“C”). This is because in all of these reports no omissions were observed as the register of Interested and Affected Parties were opened and maintained and included all organs of state which have jurisdiction with respect to the proposed projects. Similarly, the request by stakeholders to be included in the database (Review Sub-Category 3.1.2) was not rated as no requests were received from stakeholders.

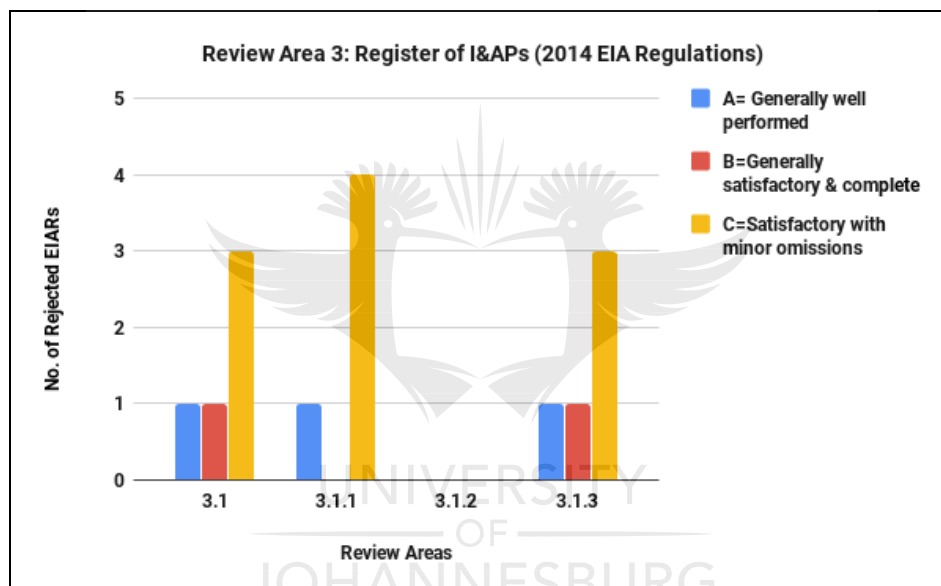


Figure 4.21: Review Area 3 - EIARs granted negative environmental authorisation (2014 Regulations).

4.3.2.4 Analysis of Review Area 4

This Review Area relates to how comments from various stakeholders were captured and addressed. Ninety percent (90%) of the reports were rated as of satisfactory quality (“A-C”) because the ‘comments and responses report’ was included and adequate responses were provided for all issues and concerns raised. In instances where inputs were not taken into consideration, adequate reasons for such exclusions were provided. Ten percent (10%) of the EIARs were, however, rated as unsatisfactory (“D-F”) as comments were not diligently captured and responses were not provided for issues raised (Figure 4.22).

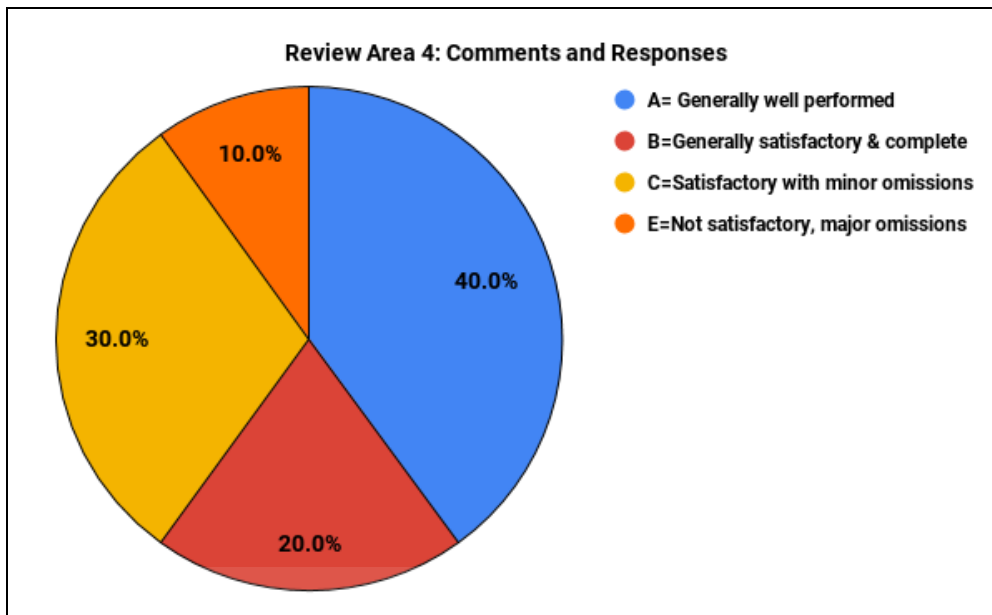


Figure 4.22: Review Area 4: Comments and Responses Report (10 EIARs).

Five of the reports which obtained a positive environmental authorisation had similar ratings for all Review Sub-Categories (4.1, 4.1.1, 4.1.2, 4.1.3, and 4.1.4) in terms of this Review Area. Three of the reports were rated as generally well lettered or recorded (“A”) and displayed no omissions and inadequacies. One report was generally satisfactory (“B”) although it displayed minor omissions and inadequacies and one report was not satisfactory as there were significant omissions (“E”) that included lack of responses to comments raised. This Review Area was generally well performed as the majority of reports (90%) were well written (“A-C”) (Figure 4.23).

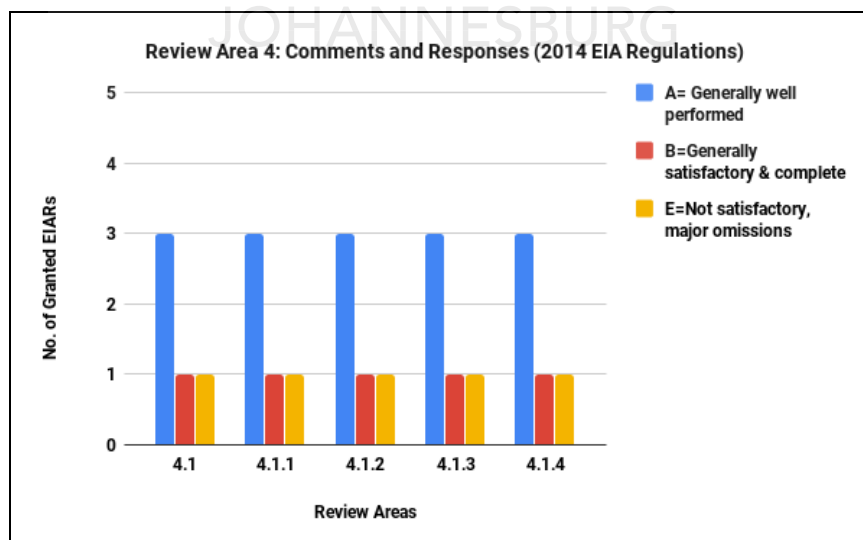


Figure 4.23: Review Area 4 - EIARs granted positive environmental authorisation (2014 Regulations).

The reports in this batch did not receive a positive environmental authorisation although they were well executed in comparison to those that received a positive environmental authorisation. This is because no omissions and inadequacies were observed as the quality ratings ranged from generally well performed (“A”) to satisfactory (“C”). The quality rating of reports within this Review Area displayed similar ratings for all Review Sub-Categories (4.1, 4.1.1, 4.1.2, 4.1.3, and 4.1.4) (Figure 4.24). Three of the reports were rated as satisfactory (“C”) despite omissions and inadequacies as the information provided was sufficient to make a decision; one report was generally well executed (“A”) and displayed no omissions and inadequacies, one report was generally satisfactory (“B”), although it displayed minor omissions and inadequacies. The information provided in this batch of reports was sufficient to make an informed decision. The minor omissions observed included the inability of the EAPs to adequately address comments but referring the matter to other experts involved in the EIA process to clarify.

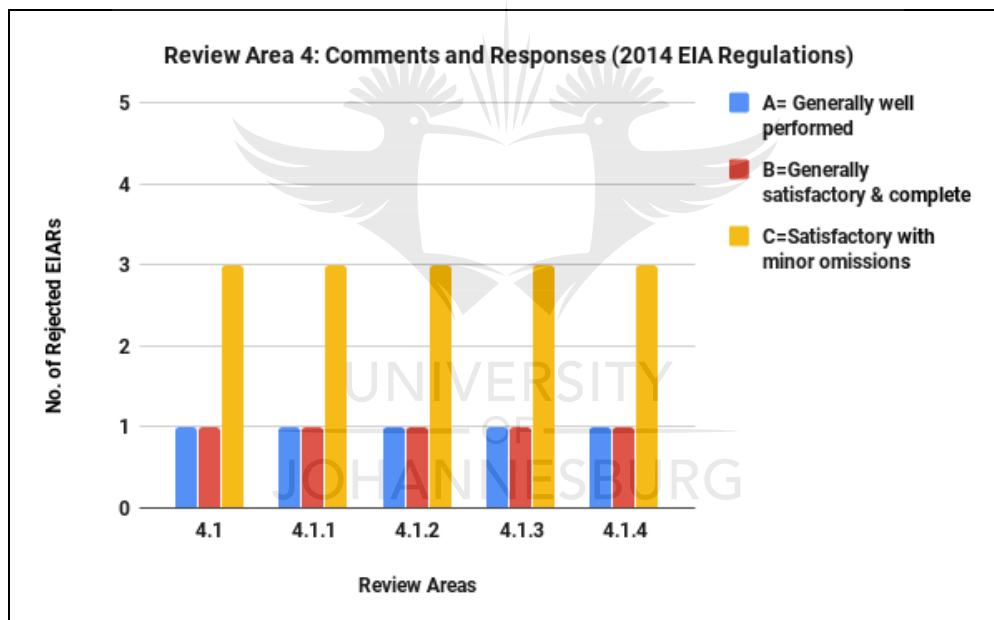
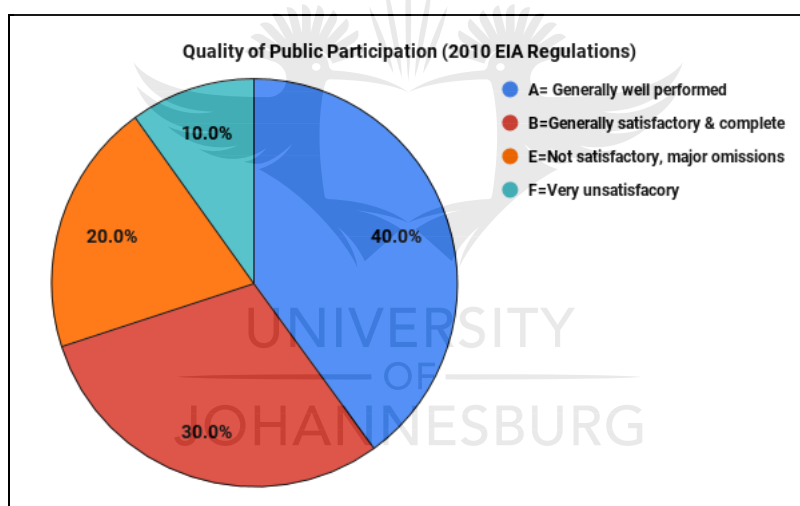


Figure 4.24: Review Area 4 - EIARs granted negative environmental authorisation (2014 Regulations).

4.4 Overall Quality Appraisals of Reports Undertaken Under the 2010 EIA Regulations versus Reports Undertaken Under the 2014 EIA Regulations

This section provides a comparison on the quality of documented public participation in all reports conducted under the 2010 EIA Regulations and the 2014 EIA Regulations. A total of 20 EIA reports were reviewed and rated accordingly. The reports undertaken in terms of the 2014 EIA Regulations were well written and displayed an excellent quality rating in comparison to those undertaken under the 2010 EIA Regulations (Figure 4.25). Ten percent (10%) of the reports undertaken in terms of the 2014 EIA Regulations displayed an unsatisfactory quality rating as there were omissions and inadequacies. However, 90% of the reports in this batch were rated as satisfactory (“A-B”) because the information provided was adequate for the competent authority to make a proper decision. Major omissions and inadequacies were observed in the reports undertaken in terms of the 2010 EIA Regulations and as a result, 30% of them were rated as unsatisfactory (“D-F”) with only 70% displaying a satisfactory quality (“A-C”) (Figure 4.25).



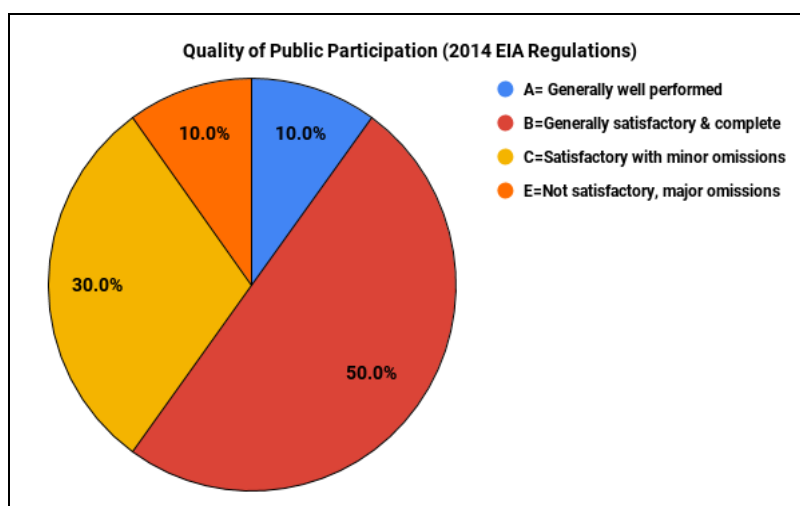


Figure 4.25: Quality of Public Participation - 2010 EIA Regulations Vs 2014 EIA Regulations.

The purpose of conducting public participation was rated satisfactory (“B”) in 50% of the reports conducted in terms of the 2010 EIA Regulations, mainly because the minimum requirements for undertaking public participation were fulfilled. Ten percent (10%) of these reports were rated as generally well done (“A”) because no omissions and inadequacies were observed and 20% of the reports were considered satisfactory (“C”) in light of the inadequacies observed. Only 20% of the reports in this batch were exceedingly unsatisfactory (“F”) due to missing information such as the details of the EAPs, the appropriateness of language use, and the indication of the duration of public participation.

The major omissions and inadequacies in reports undertaken in terms of the 2014 EIA regulations were observed in terms of Review Area 1 (Purpose of public participation) with 20% of the reports rated as exceedingly unsatisfactory (“D-F”) because of the omissions displayed in all Review Sub-Categories. Major omissions and inadequacies were observed in Review Area 1, with 10% of the EIARs being rated exceedingly unsatisfactory (“F”) while another 10 % also displayed unsatisfactory quality rating (“E”) because the information provided was not sufficient for the competent authority to make a proper decision. Seventy percent (70%) of the reports displayed a satisfactory quality rating with 50% of the reports rated as satisfactory (“C”), 20% rated generally satisfactory (“B”) and the remaining 20% being generally well executed (“A”). Despite omissions observed, this batch was well executed in comparison to the reports undertaken in terms of the 2010 EIA regulations (Figure 4.26).

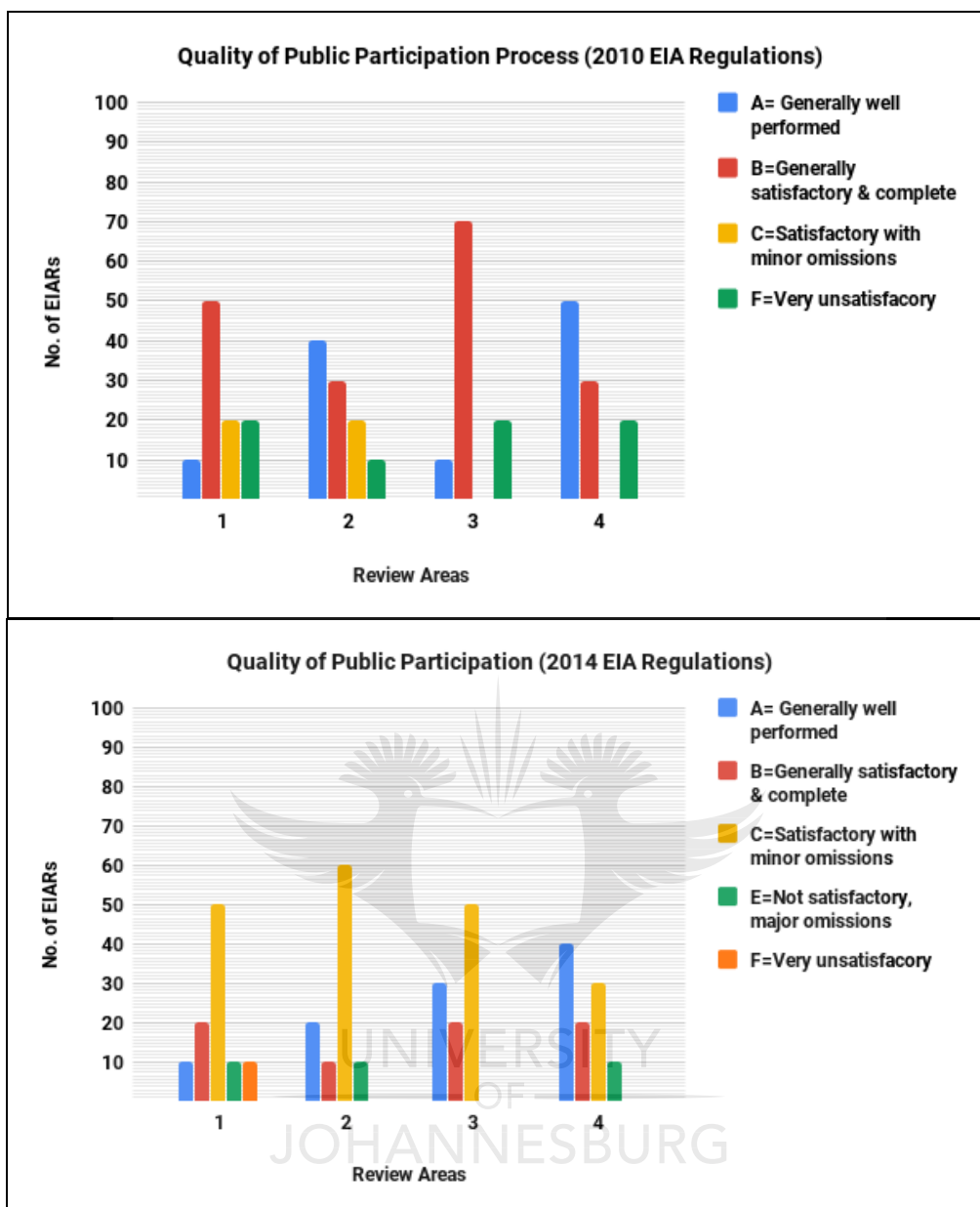


Figure 4.26: Quality of Public Participation Process-2010 EIA Regulations vs 2014 EIA Regulations.

4.5 Shortcomings and Flaws

In this section, a summary of key areas of weaknesses identified in the EIARs is given. These weaknesses are presented as follows:

- Advertisements were placed in commercial newspapers such as '*The Sowetan*', '*The Star*' and '*the Daily Sun*' instead of newspapers distributed by local municipalities such as '*the Kempton Express*', '*the Centurion Rekord*' and '*Tembisan*'. In instances where the local municipality does not provide newspapers, due diligence was not done to establish which newspaper is most accessible nor preferable by local inhabitants.
- The English language is mostly used during the public participation process and no translations are made on documents to cater for non-English speaking communities.
- Stakeholder's comments were in some instances incorrectly captured.
- The stakeholder databases were not always inclusive of all Interested and Affected Parties.
- The means and efforts to cater for any form of disability and illiteracy amongst stakeholders were not always provided.
- The issues raised by I&APs were not adequately addressed by either the Environmental Impact Report (EIR) or the draft Environmental Management Programme (EMPr).
- In most instances, there was no proof that the landowners affected by project and site alternatives were notified on the proposed activities.
- The option of considering an alternative site location was ruled out because the applicant had already purchased the site for the proposed development.
- In some instances, there was a lack of public meetings.
- Apparent lack of capacity from stakeholders to make an informed decision due to the technical nature of Environmental Impact Assessments.

4.6 DISCUSSION OF RESULTS

This section is divided into 2 sub-sections; (a) brief discussion of the changes made to the public participation process in terms of the 2010 and 2014 Environmental Impact Assessment (EIA) regulations; and (b) the discussion on the evaluation of EIARs.

4.6.1 Distinction between the 2010 and 2014 EIA Regulations

It can be seen from Table 4-1 that no major amendments have been made to the public participation process in terms of 2010 and 2014 EIA regulations. However, the most notable difference is the timeframe required to undertake public participation. The 2010 EIA regulations (Regulation 56) stipulates that all registered Interested and Affected Parties have the entitlement to comment on all written submissions. A longer timeframe was provided in terms of the 2010 EIA regulations; and stakeholders were afforded an opportunity to comment on draft and final reports. Competent authorities had the responsibility of determining the timeframes for undertaking public participation process, and this varied between various stakeholders. Organs of state were afforded longer timeframes (40 days) than non-government stakeholders (30 days). Therefore, the timeframe required to undertake public participation process would vary depending on the responsible competent authority.

In terms of the 2014 EIA regulations, competent authorities no longer have the obligation of determining the timeframes required to undertake public participation. This timeframe is stipulated in Regulation 40. Furthermore, all Interested and Affected Parties including organs of state are afforded 30 days to comment only on draft reports. This serves as a disadvantage as the provision for EAPs to afford stakeholders an opportunity to comment on final reports has not been made. Therefore, the Interested and Affected Parties are not able to see how their comments have been incorporated (where applicable). It can be seen from Section 3.3 above that the reports undertaken in terms of the 2014 EIA regulations were of a better quality (despite a shorter time being given) as compared to those undertaken under the 2010 EIA regulations. Therefore, the shorter time required to undertake public participation in terms of the 2014 EIA has not rendered it ineffective.

4.6.2 Evaluation of EIAR quality regarding public participation

The findings of this study have revealed that public participation process in environmental impact assessments in the Gauteng province of South Africa were of a generally satisfactory quality despite shortcomings and flaws observed. Review Area 1 focussed on the standard of the background information document (BID). Review Area 1 was subdivided into 8 Review Sub-Categories, namely, 1.1 the purpose of public participation; 1.1.1 nature of the proposed development; 1.1.2 location of the proposed development; 1.1.3 list of activities applied for; 1.1.4 details of the applicant; 1.1.5 details of the environmental assessment practitioner; 1.1.6 how Interested and Affected Parties will be consulted; 1.1.7 duration of public participation; and 1.1.8 language proficiency. As for Review Area 1, there seems to be a degree of similarity between the reports undertaken in terms of the 2010 and 2014 EIA regulations. Interestingly, the EIARs that received a negative environmental authorisation were actually satisfactorily written as compared to those that were granted environmental authorisation. This indicates that Section (2)(4)(f) and (o) of the National Environmental Management Act (NEMA) (Act No. 107 of 1998) (as amended) is not always complied with. Also, it can be pointed out that during the evaluation of EIARs by competent authorities, there is a distinct possibility that the details provided for public participation are not sufficiently examined for their quality and completeness.

The reports undertaken in terms of the 2010 EIA regulations were of a poor quality (despite more time being given) as compared to those undertaken under the 2014 EIA regulations despite the shorter timeframe in the regulations. This discrepancy can be ascribed to the timing of public participation which in this case appears to partly influence the quality of public participation (Schoeman, 2017). Schoeman (2017) further states that the quality of public participation is not only influenced by timing, but also by the requirements for public participation process which are interrelated. On the other hand; other researchers (Rowe and Frewer, 2000; Aregbeshola, 2009; Mnengwane, 2014; Mofokeng, 2017) maintain that the early (design stage) involvement of stakeholders would ensure effective public participation. Another factor that must be taken into consideration when involving the public is the cultural and traditional structures in place. However, the reports assessed indicate that the time it takes to undertake public participation has not affected its effectiveness. This further indicates that the effectiveness of public participation is dependent on various factors such as time, method and the language used.

Language is one of the aspects that can hinder active involvement of Interested and Affected Parties. Moreover, EIARs are technical in nature and are not easily understood by ordinary

people without the use of non-technical language and assistance of experts (Hoosen, 2010; Doelle and Sinclair, 2006; Murombo, 2008; Mnengwane, 2014). The language used in the EIARs can therefore prevent disadvantaged groups who are affected by the proposal from participating in the EIA process meaningfully (Hoosen, 2010; Doelle and Sinclair, 2006; Murombo, 2008; Mnengwane, 2014). Language translations were adequately provided for in the public participation documents for EIARs undertaken according to the 2010 EIA Regulations. To the contrary, amongst the EIARs associated with the 2014 Regulations, this study pinpointed some language problems although environmental authorisation was granted. On the other hand, the reports that received a negative environmental authorisation in terms of the 2014 EIA regulations did not have any deficiencies with regards to the appropriateness of the language used in writing sections which pertained to public participation. Be that as it may, these findings cannot be regarded as conclusive because the present study only investigated the quality of public participation to the exclusion of other parts of these EIARs.

Review Area 2 was about the extent to which the stakeholders were notified by means of different methods in line with regulatory provisions. These methods are considered effective when correctly implemented, i.e. when there are clear and visible notices placed at conspicuous places around the selected sites. The importance of this provision also relate to the extent to which newspapers are used to disseminate key information about public participation. Methods to address issues such as illiteracy amongst stakeholders and any other disability are also important. Again, the reports that received a negative environmental authorisation were well populated compared to those that received a positive environmental authorisation in both batches of EIARs. It came out that published government notices were never used in any of the reviewed EIA reports. Instead, development proposals were published mostly in commercial newspapers. To a large extent, the use of placing advertisements for planned public participation in free and locally distributed community newspapers was ignored. In a different study, this deficiency was also mentioned by Hoosen (2010) whereby the role of public participation towards the attainment of social justice was investigated. According to Hoosen (2010), the respondents who took part in the survey expressed dissatisfaction regarding the manner in which the development proposals were advertised. In addition, they also complained that the adverts were placed in unsuitable newspapers because not everybody could afford to pay for such newspapers. Inevitably, a large number of Interested and Affected Parties were excluded, and they were also unhappy with the appropriateness of the language used in these newspapers as it was not clearly understandable to the majority of disadvantaged stakeholders (Hoosen, 2010). This

indicates that the EAPs did not take cognisance of the fact that not all affected stakeholders would be reached by the choice of newspaper used.

Another factor that must be considered when conducting public participation is the accessibility of these reports. Accessibility refers to how easy it is to obtain and understand them. Accessibility is directly related to language proficiency, because all affected parties must understand what the development entails in order to participate meaningfully. The EIARs that received a negative environmental authorisation in both batches were easily accessible and some of them even included language translations. These reports were made available at public libraries, community centres, and company websites. In some of them, copies of EIARs were printed and hand delivered to Interested and Affected Parties upon requests. Moreover, proof of such communications was included in the EIARs. Furthermore, it was clearly stated in the public participation documents how Interested and Affected Parties can access the EIARs. Hoosen (2010) argues that outlining the process of accessing documents within an EIA process is an ethical matter. In a study undertaken by Mnengwane (2014), the majority of the respondents indicated that the technical skills, timing of the participation and availability of public participation documents are the main hindrances to effective public participation. The same study also reported poor-quality appraisals as it was not indicated how or where the public can obtain the EIA reports. Access to correct and relevant information is one of the most important aspects required to ensure effective decision making (Mnengwane, 2014).

Public meetings are information sharing sessions that provides a platform for Interested and Affected Parties to interact with the applicant and environmental assessment practitioner. However, meetings during public participation are not a requirement in terms of the EIA regulations. Public meetings, focus group meetings and public open days are other means that can be used to address illiteracy and any other disability. Public meetings were not held in 1 out of 5 EIA reports undertaken in terms of both the 2010 and 2014 EIA regulations that received a positive environmental authorisation. However, meetings were held in all reports that received a negative environmental authorisation. Public meetings should ideally be held for these types (Mixed-Land use) of development proposals as they are often complex, large in extent and have major impacts on the services (roads, electricity, water and sewage). There is however the reluctance from stakeholders to attend public meetings because although issues raised during meetings are captured, feedback is not always provided (Hoosen, 2010, Mnengwane, 2014). Furthermore, the venue and timing of the public meetings are not always accessible and convenient to all stakeholders (Aregbeshola, 2009).

The study undertaken by Schoeman (2017) indicates that public meetings were the most effective form of consultation used before and during public participation in EIAs.

Review Area 3 focussed on the extent of quality to which the register of Interested and Affected Parties was maintained. The identification of stakeholders is the most crucial stage of the public participation process (Glasson et al., 2005; du Plessis, 2008; Aucamp, 2009). Registering as an interested and affected party allows stakeholders to participate in the EIA process. The EIA regulations stipulate that a database of all Interested and Affected Parties must be opened and maintained. The identification of stakeholders is done through invitations to register as an interested and affected party. The process of how stakeholders can register as Interested and Affected Parties must be clearly communicated in the public participation documents. Some stakeholders must be specifically approached and these include, for example, organs of state, landowners, adjacent landowners, community leaders and non- profit organisations. The EIARS undertaken in accordance with the 2010 EIA regulations that did not receive a positive environmental authorisation were well drafted when compared to those that received a positive authorisation in terms of Review Area 3. The register of Interested and Affected Parties was found to be comprehensive enough and included all stakeholders who were interested or affected by the development proposal. Furthermore, the requests from stakeholders to be included in the database were addressed.

On the other hand, the EIARs that received a positive environmental authorisation had a lot of deficiencies; stakeholder databases were incomplete (they did not contain all the names, contact details and addresses as required by the NEMA EIA regulations), and did not include all stakeholders. Requests from stakeholders to be included in the database were also not properly addressed. According to Aucamp (2009), the exclusion of stakeholders could result in a situation whereby competent authorities reject the application, and subsequently further public participation is instructed. In this instance, the EIARs undertaken in terms of the 2014 EIA regulations were well written when compared to those undertaken in terms of the 2010 EIA regulations. As a result, EIARs undertaken in terms of the 2014 EIA regulations had no deficiencies, their databases were comprehensive, and all requests from stakeholders to be included in the stakeholder database were addressed. Similarly, sufficient opportunity for stakeholders to register and participate in the EIA process has been mentioned in several studies (Aregbeshola, 2009); Hoosen, 2010; Mnengwane, 2014; Mofokeng, 2017; Schoeman, 2017). Therefore, documented public participation in reports undertaken in terms

of the 2014 EIA regulations was more effective as compared to those undertaken in terms of the 2010 EIA regulations.

The requirements for Review Area 4 entailed capturing comments raised by Interested and Affected Parties and providing appropriate responses to them. These comments as well as the responses in the public participation report must be duly recorded in the EIARs (Murombo, 2008). Furthermore, copies of original comments and responses must be attached to the EIAR. A *“comments and response report”* must also be compiled and included in the EIAR. The reports that received a negative environmental authorisation were well executed when compared to those that received a positive environmental authorisation in both EIA regimes in terms of Review Area 4. The responses to comments and issues were deemed adequate and copies of comments were included in the EIARs. By contrast, unsatisfactory responses were observed in reports that received a positive environmental authorisation in the two EIA regimes. Also, responses such as *“noted”* were provided to concerns and comments instead of providing detailed responses and clarity. Furthermore, comments were not always responded to and copies of original comments were not included in these EIARs. Some of the vital comments raised included requests for additional specialist studies to be conducted; revision of the layout plan; and identification of alternative site/activity. Unfortunately, in the present study these comments were not properly documented and addressed, thus differed from the findings in other studies (Aregbeshola, 2009; Hoosen 2010; Mnengwane 2014, Markowitz 2016; Mofokeng, 2017 and Schoeman, 2017).

Shortcomings observed in this study were discussed in sub-section 4.5. Based on all results, the following points can be deduced from this study:

- The quality of the documentation of the public participation process has improved because the reports undertaken in terms of the 2014 EIA regulations were relatively well documented when compared to those undertaken in terms of the 2010 EIA regulations.
- EIARs that received a negative environmental authorisation were well drafted when compared to those that received a positive environmental authorisation. However, this discrepancy cannot be definitive until comprehensive quality evaluations of the other sections of the reviewed EIARs are systematically examined as well.

- The outcome of this study concurs with the notion expressed by Kotze (2008) that although NEMA (Act No. 107 of 1998) provides for ample stakeholder involvement in EIA processes, this statutory requirement is not always complied with.



CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter provides conclusions based on the research findings and recommendations for further research. Furthermore, this chapter is presented in two sections. Section 2.2 is a summary of conclusions while Section 5.3 provides recommendations for improved public participation process within the EIA context.

5.2 CONCLUSIONS

This study was aimed at evaluating the quality of public participation process during the Environmental Impact Assessment (EIA) processes that were carried out for mixed land-use development projects. Consequently, the research examined the EIA quality in terms of documented public participation against the legal and procedural compliance to the 2010 and 2014 EIA Regulations. This public participation was relevant for EIARs conducted in the Gauteng province of South Africa. Before the conclusions are provided, a brief recapitulation of the research objectives is provided below:

- To draw a distinction between 2010 and 2014 EIA Regulations with respect to statutory requirements for public participation;
- To assess the quality of public participation in EIAs conducted under the 2010 EIA Regulations;
- To examine the quality of public participation in EIAs undertaken under the 2014 EIA Regulations;
- To identify the variations, gaps, and flaws (or omissions and inadequacies) in the public participation process undertaken under the 2010 and 2014 EIA regulations;
- To provide recommendations for effective public participation process; and

This study has determined the distinctions between the 2010 and 2014 EIA regulations as far as the requirements of public participation are concerned for proposed projects, including mixed land-use developments. Overall, there are minor distinctions between these regulations and they relate mainly to time frames over which the public participation process is allowed. Whereas the 2010 EIA Regulations required longer period (30 days for draft

reports and 21 days for final reports) for the process, the 2014 EIA Regulations prescribed a relatively shorter process (30 days only on draft reports).

Most EIARs produced under the 2014 EIA Regulations were compiled relatively satisfactorily. On the other hand, various quality deficiencies were found in EIARS conducted under the 2010 EIA Regulations. However, the requirements for Review Area 2 (i.e. public participation process) were found to be the most well written with regard to compliance to 2010 EIA Regulations. Thus, 90% of these reports were of a satisfactory quality. Furthermore, Review Areas 1, 3 and 4 depicted similar quality ratings with 80% satisfactory EIARs. In terms of the EIARs conducted under the 2014 EIA Regulations, Review Area 3 was compiled in an outstanding manner and none of these EIARs exhibited a poor ("D-F") quality rating. Similarly, Review Areas 1, 2 and 4 displayed similar degrees of high quality. This is because 80% of these EIARs were of a satisfactory quality, although 20% of them failed to pass the quality test. This study revealed that Review Areas 1 (which focused on the purpose of public participation) and 4 (i.e. how the comments from various stakeholders were captured and addressed) displayed minor omissions for both 2010 and 2014 EIA regulations. If these omissions can be adequately addressed, then the quality of public participation can improve in conducting these tasks.

5.3 RECOMMENDATIONS

Public participation is one of the important steps in the Environmental Impact Assessment (EIA) process, hence it must be given high priority in environmental assessment decisions. Judging from the results of this study, the following recommendations are made for improved public participation process and further research.

- The EAPs and developers must consider inputs from stakeholders. Such comments must be adequately addressed and timeous responses should be provided. In instances where comments are not taken into consideration, adequate reasons for exclusions must be provided in a manner that is not arrogant nor demeaning to Interested and Affected Parties. All concerns, comments and issues raised must be recorded and provided to the competent authority. If this is done, the competent authorities will be enabled to make informed decisions on the environmental feasibility of planned projects and how they affect the public.
- To ensure effective public participation process, more time must be made for public participation process and must not be limited to legislated timeframes; the EAPs must advise project proponents to involve stakeholders at the design stages of their

planned development actions. This will afford Interested and Affected Parties ample time to make contributions to development proposals, and where there are disagreements these can be resolved at the earliest stages and inputs from various stakeholders can assist in developing layout plans, thus saving the developer the cost of re-developing layout plans. This earlier involvement also minimises the risk of appeals and litigations which may arise at the later stages of the environmental impact assessment process.

- EIARs are generally technical in nature, and in order to ensure the active involvement of stakeholders, the EAPs must make use of language that is easily understood by all Interested and Affected Parties. Thus, visual aids in the form of flow charts, diagrams and pictures must be used to ensure that stakeholders understand the different ramifications of project proposals. Therefore, Interested and Affected Parties must be grouped carefully depending on their expertise and concerns. To enhance better communications and insights, focus group meetings can be held with different groups. This will assist in preventing intimidation amongst stakeholders. Furthermore, the language used must be understandable to the local citizens. Where applicable, documents must be distributed and printed in more than one language depending on the language used by the local citizens. The information provided to stakeholders must be factually correct, thus EAPs and their clients must not “oversell” the project. This means that they must be open, honest and transparent about the nature of anticipated impacts and how they can be mitigated successfully without placing environmental burdens on the public. Any information relevant to the project must not be withheld from Interested and Affected Parties. This will ensure effective public participation process.
- The EIA reports must be easily accessible and available to all stakeholders upon request. Furthermore, there must be various avenues in which stakeholders can obtain these reports. These avenues include making community centres and libraries, websites and hard copies/ electronic copies accessible. Furthermore, newspaper adverts must also be placed in community newspapers and not only in national and regional newspapers.
- Lastly, should significant changes be made to the draft EIARs, the final versions must be circulated to stakeholders for another round of comments prior to the final submission being made to the competent authority.
- As for further research, it is recommended that more quality studies of public participation must be undertaken in other provinces of South Africa and they can

focus not only on mixed-land use property developments but also on other economic sectors such as power generation, mining, and waste management projects.



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